

exchange for payment of freight for import-export trade and also helps to serve the existing markets as well as to explore new ones. Inadequate shipping services constitute a major constraint on a massive expansion of production and a vigorous development of export trade. Further, exports of shipping services as compared with exports of visible goods have many advantages from the point of view of earning foreign exchange. Thus shipping serves as one of the important prime-movers of the economy. In addition to this, every maritime country having a coastline of its own has recognised the importance of navy in safeguarding its territorial integrity and accordingly is taking steps so as to provide for adequate naval fleet.

India's overseas cargo traffic has grown on the average by 13% per annum (i.e., from 17.70 million tons to 50.2 million tons) during the period 1955-56 to 1969-70. But the overall share of Indian shipping in the carriage of the country's overseas trade is less than 20%. It is true that the total shipping tonnage in the country has increased from 0.192 million GRT on the eve of Independence (i.e., the 15th August 1947) to about 3,636 million GRT as on the 1st January 1975. Yet India has to depend upon foreign shipping to carry more than 80% of its overseas trade resulting in an outflow of Rs. 180 crores worth of foreign exchange annually. Apart from this, the world-wide shortage of shipping and the insignificant share of Indian tonnage (1%) in the world shipping operate as the most significant bottleneck in the expansion of export-import trade. Indian shippers experience great difficulty in securing shipping space for important cargoes even for traditional markets of the U.K. and Western Europe. The position is much worse for the newly created export markets.² The recent oil crisis and the sharp rise in the world prices of some of the major imports like steel, non-ferrous metals, fertilisers, etc., have brought into focus the need for accelerated growth of India's exports. In this context, availability of adequate transport facilities at

2. The efforts of the country to diversify its export trade and develop new markets are particularly hit by the absence of regular and frequent shipping services between Indian Ports and the countries having a large export potential, as for example, countries in Africa, North Mediterranean coast and in Latin America.

reasonable cost is a factor of major significance. Further, as rightly pointed out by the Parliamentary Consultative Committee, while national shipping tonnage is expanded the possibility of earning foreign exchange through participation in international cross trades is to be taken into consideration.³

India has a long coast line extending over 3000 miles having access to sea on the three sides. The development of coastal shipping as a part of purposeful strategy to relieve congestion on rail transport and thereby stepping up the movement of coal, iron ore and steel and thus help the maintenance of continuous production effort deserves to be considered on a priority basis. However, it is a tragic fact that the coastal shipping is almost on the brink of extinction. The strength of the coastal fleet has progressively diminished from 0.4 million GRT in 1964 to 0.19 million lakhs GRT in 1974.⁴

It has been calculated that India requires 8.54 million tons of merchant shipping by the end of 1978-79 and 10.89 million tons by the end of 1983-84 so as to carry the anticipated 50% share of India's overseas cargo traffic, and 100% of coastal traffic. Accordingly, the Fifth plan proposes to expand shipping tonnage to the extent of 8.642 million GRT, operative and 1 million GRT on order. This target would be just around 2.5% of the world tonnage and this is considered to be imperative. Added to this, India's geopolitical position in the Indian ocean naturally makes heavier demands on the naval fleet in future. Defence of the merchant fleet, off-shore resources including fishing and oil supply lines and the long coast, demand that the country expand its naval fleet for better command and control of the seas on all its three sides.

The required additional shipping tonnage—both merchant and naval—can be either acquired from foreign countries or built in India. Building up of ships in foreign yards presents many problems like time lag, political considerations, rigid

3. It is a matter of gratification to note in this connection that Indian ships earned foreign exchange of Rs. 46.71 crores during 1971-72 by way of freight in international cross trades and from foreign parties.

4. This has been due to the cumulative effect of several adverse factors like absence of assured availability of cargoes on a long term basis, spiral of rising costs of operation, draft restrictions and inadequate handling facilities at ports, etc.

terms of payment, inclusion of escalation clauses in price agreements, foreign exchange shortages, uncertainty in times of emergency, etc. It may be noted here the acquisition of additional merchant and navy ships from abroad during the next few years would require a sizable foreign exchange allocation running into a few thousand millions of rupees. It has been said that with the foreign exchange needed by the Shipping Corporation of India Limited, for building two tankers abroad, a shipyard could be constructed in this country. It has also been estimated that each ship produced in India will save an amount of Rs. 37 millions worth of foreign exchange after allowing for imports of materials and machinery required for this purpose. Further nearly 65 to 70% of the cost of construction of a ship represents 'bought out' materials and components. Consequently, a rapid expansion of the indigenous shipbuilding industry will induce a corresponding growth of the engineering and marine equipment industries thus contributing to the expansion of employment opportunities. Thus there is a great potential in resuscitating and expanding our shipbuilding industry in a systematic manner.

It is however unfortunate that in India, while shipping has expanded, shipbuilding industry has not received due attention from the Government. Realising the importance of the shipbuilding industry and also of the wider national advantages that would accrue along with its growth, many maritime countries including industrially advanced countries like the U.S.A., France, West Germany and Italy offer attractive subsidies ranging between a minimum of 10% and a maximum of 55% of the cost of construction and other types of assistance like liberal credit facilities, higher rate of depreciation, development rebate etc.⁵ It is true the Government of India has been investing funds by way of equity and loans and also allows construction subsidy and certain tax benefits to the shipbuilding industry, But these efforts cannot be considered significant from the point of view of overall requirements of Indian shipbuilding

5. Japan has been able to secure an increasing share of the shipbuilding market (where order books for the last five years exceed 50% of the tonnage under manufacture throughout the world) because of mainly Government assistance.

industry. Experts have held the view that, after Japan, by virtue of its central location, vast coast line and the existence of well-developed steel and engineering industries, India offers the greatest possibilities of emerging as a major shipbuilder and ship repairer. This expert assessment, and the hopes based on it, have so far remained only a distant dream.

The role played so far by the Indian shipbuilding industry in the expansion of shipping tonnage is really modest. Its contribution has not exceeded 10% of total Indian tonnage. It cannot be otherwise since only the Hindustan Shipyard, Visakhapatnam is producing on a regular basis medium sized ocean-going vessels. The Mazagon Dock at Bombay and Garden Reach Workshops at Calcutta till recently were concentrating on ship repairing and on the construction of harbour craft and other small vessels required by the Indian Navy.

Hindustan Shipyard Limited, Visakhapatnam, the pioneer shipbuilding yard in the country, started in 1943, owes its existence to the extraordinary vision, perseverance and drive of the late Shri Walchand Hirachand, the then Chairman of Scindia Steam Navigation Company Limited, who fought a relentless battle against the discriminating attitude in the sphere of indigenous shipping and shipbuilding by the Government of the day. The commencement of the yard symbolized the revival of the shipbuilding industry in modern form in this country which in the ancient times was among the foremost maritime countries of the world. India had a glorious maritime tradition going back to 3,000 B.C. when the ships of the Indus Valley Civilization traded with the civilizations of the Persian Gulf. Through centuries India built ships in large numbers which enabled her people to develop commercial and cultural contacts with Red Sea, Egypt, South East Asian countries and beyond. With the loss of independence and with the advent of iron built steam ships, Indian shipbuilding received a serious setback which led to a long spell of halting phase. Significantly, it was only after the country became independent in 1947, that the first ship 'Jala Usha' built in the shipyard at Visakhapatnam rolled off the slipways on the 14th March 1948 having been launched by the first Prime Minister of India, Sri Jawaharlal Nehru.

Considering the national and strategic importance of the

shipbuilding industry and in view of the hesitancy of the private enterprise⁶ to take risks involved in its development, the Government of India acquired a major interest in the Shipyard in 1952. The Government of India has included the shipbuilding industry in the core sector and pronounced through the Industrial Policy Resolution of 1956 that the future development of the industry will be the exclusive responsibility of the State. In accordance with the spirit of this resolution, in July 1961, the shares held by the private enterprise in the Hindustan Shipyard were also acquired by the Government and since then it has become a full-fledged public sector undertaking. The Hindustan Shipyard which began with the construction of steam ships in the range of 8,000 DWT, with the phased programme of expansion under the technical guidance of French and West German consultants during the last two and half decades, has now reached a stage of development of accepting orders for completely welded general cargo vessels upto 15,000 DWT and bulk carriers upto 25,000 DWT. Apart from several ocean-going modern liners, the yard has built passenger ships, naval survey vessels and a variety of other specialised marine craft which stood the test of time both in respect of quality and trouble free performance. As on 31st March 1974, a total number of 63 ships (including small craft) aggregating to over 5,37,671 DWT have been built and delivered by the Yard. So far it has contributed 10% of total Indian tonnage; but if only the liner and dry cargo tonnage is taken into consideration tonnage built in the Shipyard amounts to 22%. The saving in foreign exchange on account of ships so far built by the yard is reckoned at over Rs. 300 millions. The Hindustan Dry Dock, the largest of its kind in the country, is a recent addition to the Shipyard, expanding its ship repairing capacity. The dock is capable of accommodating all types of ships upto 57,000 DWT and some in the range upto 70,000 DWT.

The Mazagon Dock in Bombay and the Garden Reach Workshops at Calcutta have been recently developed into major shipbuilding yards for building war ships as well as merchant

6. After building eight ships totalling 31,105 GRT, the private enterprise found themselves unable to finance future programmes of construction and expansion without State assistance.

navy ships. While the Garden Reach Workshops can build two vessels aggregating 30,000 to 50,000 DWT, the Mazagon Dock, Bombay can build vessels of 12,000 to 15,000 DWT. The Cochin Shipyard which is still under construction can build two ships aggregating 1,50,000 to 1,75,000 DWT. Thus the overall capacity available in the country for shipbuilding is roughly about two lakh GRT which is far inadequate compared to our annual requirements of one million GRT during the five year period 1974-79. This situation underlines the urgency of exploiting the potential indigenous shipbuilding capacity to the fullest extent. This can be done by expanding the capacity of existing yards and by setting up new shipyards in the country. However, since the setting up of the new shipyards is a time-consuming process involving 8 to 10 years, India has to depend more on the expansion of the existing yards. Another important issue is that developments in shipping and shipbuilding particularly in respect of the size, type and design of the ship are taking place⁷ at a fast rate and if India were to retain her present position it is obvious that she cannot hope to remain in the background in this global programme of shipping development. In this context, the Hindustan Shipyard, the premier and the biggest shipbuilding unit in the country is expected to play an important role in stepping up and in modernising the Indian tonnage during the next five year period. It is also feasible to make the Hindustan Shipyard capable of building not only merchant ships of various sizes but also war ships and naval crafts with marginal reorientation of skills which is particularly helpful in times of emergency.

Need for the Study

The Hindustan Shipyard in recent years was subjected to certain important criticisms, viz., under-utilisation of capacity; delayed deliveries of ships; and high cost of construction. While the capacity of the yard is three ships each of about 12,500 DWT aggregating to 38,000 to 40,000 DWT per annum with existing manpower and machinery, the performance of the yard during the last ten years (1961-71) has been only 2.4 ships

7. As against conventional ships of 16/20,000 DWT tons, giant tankers and bulk carriers of more than one lakh DWT have come into existence.

per year on an average. During the period 1967-71, 10 vessels were delivered with an average interval of 4.8 months between each event in the time series. But the sequence of delivery dates during the period shows that there were five ships which took more than this average time and in the case of two ships the actual time exceeds by seven months. It is also evident that the Shipyard is capable of concentrating all the energies on two vessels at a time on the outfit division. This analysis clearly indicates that it is well within the capacity of the Shipyard to deliver one vessel every four months. On many occasions the Shipyard was criticised that the cost of construction had been continuously increasing with a corresponding increase in the subsidy.⁸ But cost reduction in the shipbuilding industry is not a simple proposition. Nearly 65% to 70% of the cost of construction of a ship represents, bought in materials and components, the remaining 30% to 35% representing the cost of labour and over heads. It has been observed by MBO team⁹ that the possibility of reducing the cost of materials is remote. But the cost of labour and overheads per unit of construction can be reduced by increasing the production by reducing the nil allocation of labour and by improving the productivity—all of which can be ensured only with the continuous and wholehearted co-operation of employees.

Thus the shortfalls in the above three areas have been mainly attributed in some quarters to the state of industrial relations in the Hindustan Shipyard.¹⁰ The Institute of Workstudy, Mussorie after conducting a survey in 1965, estimated that the man-power utilisation in the yard was 38.60%. In 1966, Messrs Daya Shankar and Associates basing on a random sampling

8. The ships constructed in the yard are sold to the owners, by and large, at international prices and invariably in all cases the sale price is lower than the cost of construction. The difference between the sale price and cost of construction is reimbursed by the Government in the form of direct subsidy. Government assistance in one form or the other is common in all shipbuilding countries.

9. The Management by Objectives team was appointed in 1971 to conduct investigation into the policies and goals of the Hindustan Shipyard.

10. Other important reasons for this state of affairs are: lack of advance orders, delays in the release of foreign exchange and issue of import licences and delays in procurement and high cost of indigenous materials which are mostly beyond the control of the local management.

exercise estimated that the average productivity effort of labour was 33%. It has been reported that for a ship of 'Mitsubishi' type of 12,500 DWT it would take 232 man-hours per DWT in the Hindustan Shipyard while it is only 17 in Japan. 'Bad industrial relations, low wages and absence of incentives' are reported to have been mainly responsible for this low productivity of labour.

Against the above background, it has been proposed to study industrial relations in the Hindustan Shipyard which represents the shipbuilding industry in India. The chief aim of the study is to enquire into the nature of personnel and union-management relations in the Hindustan Shipyard particularly during the period 1957-71, causes therefore and their consequences. This study, it is felt, would be useful in the context of the imperative need for toning up the efficiency in the working of the Shipyard, which is expected to play a crucial role in the years to come and give a new outlook to the labour policy laid down by the national Government.

The purpose of the study, it may be emphasised, is not fault-finding, but to find out why certain deficiencies, if any, have occurred and how they could have been avoided. This naturally requires a lot of objective and positive analysis of the problems. This enquiry, it is expected, would be helpful in formulating future course of action in the area of personnel management and industrial relations. This will enable the four parties—Government, management, employees and their unions—to know the causes underlying the existing position, to understand and appreciate the other party's attitude and thus promote conciliatory behaviour which is the prerequisite for the growth of healthy industrial relations in any enterprise. The basic objective of this study is to emphasize on the integration of goals of individual employees and that of the organisation. The data presented the observations made and conclusions arrived at in this study are also expected to be useful for interfirm comparison not only in the case of other shipyards which are newly developed and those which are proposed to be established in the next few years but also in respect of other public sector undertakings in general.

It is true the Shipyard is faced with many constraints like erratic flow of materials, outmoded machinery and equipment,

lack of standard working methods, and lack of planning and co-ordination. And the management will have to take steps so as to introduce modern facilities and equipment in the prefabrication shops and berths; production planning and control techniques; and norms and standards so as to evaluate the performance of each department.

But the success of these techniques depends to a large extent on the attitude of employees and behaviour of their unions. Hence this study is concerned with the evaluation of attitudes, behaviour and performance of human factor in the Hindustan Shipyard. An attempt is made here to touch the highlights with broader perspective so that the many aspects of industrial relations that contribute for industrial harmony and higher productivity are brought out.

Case studies in industrial relations have been carried out by several researchers both in India and abroad, to find out whether certain characteristics common to all could be observed in units having good industrial relations as against those with chronic conflict. Particular reference has to be made to a study conducted by Professor K.V. Sivayya on "Industrial Relations in Shipbuilding Industry" under the aegis of Planning Commission, Government of India. This study ended with 1961 and many developments have taken place subsequently. It is felt that it would be interesting as well as useful to enquire into the causes and consequences of these developments and their overall effect on industrial relations in the Hindustan Shipyard.

Scope of the Study

This study is concerned with an enquiry into the following nine key areas which help us in determining the nature of industrial relations in the Hindustan Shipyard: (a) Employment structure and its trends; (b) Disciplinary behaviour; (c) Absenteeism; (d) Accidents; (e) Productive efficiency; (f) Monetary emoluments; (g) Welfare programmes; (h) Conflict and co-operation; and (i) Role of employee organisations in this regard. Each of the above key areas has been dealt with in separate chapters while areas II, III, IV and V have been discussed in one Chapter. The study goes into the very genesis of the

shipbuilding industry and its performance over the last two and half decades. The last chapter summarises the observations arising out of earlier chapters and sets out certain important conclusions.

Limitations

The conclusions arrived at in this study are not without limitations. We cannot safely extrapolate from the past and present to have a preview of the future industrial relations in any organisation. Hindustan Shipyard is no exception to this. Many changes, particularly in a free society, like that of India—continuously take place, and a simple projection of current trend appears to be most precarious. The changes include shifting values, beliefs and goals of the employees—their unions, management and government. And unless, we make a constant study of the impact of these changes and their influences, it may not be possible to assess correctly and adequately the trend of industrial relations. Nevertheless as rightly commented by Robert Dubin “life goes on, society has continuity. The past and present do contain atleast some of the seeds of the future.”¹¹ It is with this belief, the present study has been undertaken and it is expected to serve a useful purpose in moulding the future of industrial relations in the Hindustan Shipyard.

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LEGEND

One Lakh	100 Thousands
10 Lakhs	One Million
One Crore	10 Millions
One Mile	1.6 Kilometres
GRT	Gross Registered Tonnage – a measure not of weight but of the cubic capacity of a ship's enclosed spaces. The size of a country's merchant fleet or her shipbuilding output is usually quoted in gross tons where one ton equals 100 cubic feet.
DWT	Dead Weight Tonnage – a measure of the ship's total carrying capacity in tons weight including cargo, fuel, passengers and crew when fully loaded down to her permitted load line. Output figures are normally expressed in terms of GRT but individual ships are often described in terms of their DWT. These two are quite separate units of measures with no fixed relationship to one another or to the turnover they represent. The ratio of GRT to DWT varies depending upon the size and type of a ship.

METHODOLOGY AND SAMPLING

The study is based on the information collected in the course of census and sample enquiries. The census enquiry is conducted so as to collect qualitative and quantitative information (from the records of management) relating to the nine key areas which have been covered in this study. The information has been collected mostly from the time office, and data in respect of staff and officers have been obtained from the personnel department. However, in the absence of availability of data in the required pattern, much time and effort had to be devoted for collecting raw data which has been subsequently subjected to statistical treatment. It had to be classified, tabulated and analysed. In spite of the fact that the Shipyard has been established 30 years ago, no serious attempts have been made to improve the methods of presentation of the data.¹ Further adequate records of statistical information have not been maintained and this had turned out to be a major constraint in this enquiry in improving its quality.

In respect of Labour Union and Staff Association the two methods of enquiry – census and sample – were followed, but the records of the census information of the Labour Union were thoroughly inadequate and it had become very difficult to get historical data. Even in respect to recent years, there were many inadequacies and loopholes in the information supplied by them.

The collection of census data was started in April 1970 and up-dated periodically. Tabulation was taken up as soon as the interviews were over in September 1972. The census information

1. Recently in November 1970 with the introduction of computer the position is said to have improved to a considerable extent.

collected both from management and unions was supplemented by the personal observation and also the opinions elicited through interviews with the employees, union office bearers and management officials. For this purpose, separate schedules were prepared for workers and staff, management and union leaders. The schedules were pre-tested before they were printed.

The schedules meant for workers and staff were fairly exhaustive and were designed so as to elicit information about their socio-economic and cultural background, composition of family, wages earned, family income, indebtedness, attitude and morale, commitment to establishment, relationship with the union, etc.

The schedule meant for management sought information as to the problems faced by the management from time to time, their concern for profits, productivity and production, knowledge of workers, problems concerning the workers and their welfare, wages paid, and their relations with union leaders.

The schedules meant for the union members and leaders were also exhaustive covering many important aspects relating to the early history, organisational difficulties, policies of collective bargaining, union finances, membership, workers' association with management, participation of workers in strikes, areas of content and discontent. Further relevant records were also consulted to get more information.

The names of all the workers as on 1-6-1972 with their trade, pay scales, ticket numbers and departments were taken from the time office. For regular workers, stratification was done on the basis of skilled, semi-skilled and unskilled categories. The classification of the total workforce into these three categories was done on the basis of their occupations. Three separate frames were prepared for these three categories and were used for drawing samples. Random samples using $1/20$ as the uniform sampling fraction, were drawn for the three categories with the help of a table of random numbers. The total number of workers as on 1-6-1972 was 4,124 out of which 2,577 were skilled, 827 were semiskilled and 720 were unskilled; of which 129 (5%) of skilled workers, 40 (5%) of

semiskilled workers and 36 (5%) of unskilled workers were interviewed. Thus in all, 205 workers were interviewed. All departments and almost all trades were represented in this sample.

To study the regular employees other than workers, the names, designations, departments and pay scales of all staff were taken from the time office of the Shipyard. Here stratification was done under three groups-Supervisory group (G1) of which 23 were interviewed, General staff (G2) of which 19 were interviewed and class IV employees(G3) in which 21 were interviewed, thus in all 63 workers were interviewed. Under supervisory group those who directly supervise the workers such as supervisors, assistant supervisors and chargemen were included, while under G2 clerical staff were included; peons, messenger boys, gatemen, cleaners, etc., were included in the G3 group.

Interviews of workers and staff were started on the 13th June 1972 and continued till the 10th September 1972. The workers of the department close to the time office were interviewed in the time office; for other departments the interviews were conducted in their respective departments. The information was elicited from the workers—one at a time—thus giving no scope for the co-workers or other employees to prompt. The actual time taken for each interview varied from 45 minutes to one hour, in few cases it was extended to two hours. Experienced workers who furnished valuable data on various aspects naturally took more time, prior to the commencement of interview, the objectives of the investigation were briefly explained so as to instill confidence in the employees and thereby to elicit quality information from them. Throughout, the interviews were conducted in a cordial atmosphere and the workers could express their opinion freely.

Regarding interviewing management cadre the names of all officers were taken and a considerable number (30) of them were interviewed taking into consideration their availability, time at their disposal and the information that they could part with.

Almost all union leaders and office bearers of the years 1971 and 1972 were interviewed. No specific time period could

be fixed for interviewing the officials of both management and union. On many an occasion, the interview had to be extended to more than one sitting, depending on the time and amount of information.

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IN QUEST OF INDUSTRIAL HARMONY

A. Introduction

The term 'industrial harmony' refers to harmony between persons or groups of persons – particularly labour and management – the two major partners of industrial community. Industrial harmony necessitates the creation of an industrial order in which the two major partners – accept the actual situation as just and must in spite of differences of opinion, be willing to work together actively. This requires the development of mutual confidence in the abilities and intentions of the parties. Confidence is a form of capital, i. e., just as much a prerequisite for industrial change as any other form. If either party proposes a change in a technical and social organisation of a plant, that change will go into effect only if the other party has enough confidence in the first to wait and see what the results of the change will be and to suspend judgment. "Confidence is a form of capital that must be spent to get change, and if the change is accepted by the parties as favourable, the capital is restored."¹ If the objective is to have an expanding, flexible, adaptive society, ready to take risks in the technological and social fields this confidence is absolutely essential.

Further industrial harmony involves "the conditions of sub-

1. Homans George C., "Industrial Harmony as a Goal," *Industrial Conflict*, edited by Arthur Kornhauser, Robert Dubin and Arthur M. Ross, McGraw Hill Book Co. Inc., New York, 1954, p. 49.

stantial justice, not justice in terms of what theoretically ought, but justice in terms of what is felt to be just by all sorts of persons”² In fact industrial harmony developed in justice is said to be far more stronger than the one developed on good human relations. This situation of industrial harmony increases not only the *effectiveness of the organisation* in producing goods and services but also the *human development and satisfaction* of persons in the organisation.

Industrial harmony, however, does not mean that the interests of management and labour can be furthered indefinitely because at some stage or the other the interests of one group conflicts with the other and hence the society will have to control these interests and manage in such a way that the interests of all the groups are reasonably satisfied. It may be noted here that the management and unions have some interests in common like the preservance of the organisation, its jobs and probably the preservation of the nature of economic system. It is also to be realised that they too have certain common duties like the provision of cheap goods and services to the consumer. Thus, industrial harmony requires a community of reasonably responsible men so as to hold all the interests in balance and provide possible maximum satisfaction to all the groups – particularly management, labour and the society at large. This emphasises that industrial harmony is a goal worth striving for in the long run. If the workers are discontented with both the material and the other conditions of their life, it breeds conflicts. And if we allow the emergence and continuance of industrial conflicts, they might eventually destroy the very nature and structure of the economic system.

It is true a society, where industrial conflict is *supressed* by force, can also work. But in a democratic society like that of India, this course of action cannot be thought of and the only possible method for the promotion of industrial harmony is by attacking the sources of discontent with appropriate steps. In fact the problem of preventing industrial conflict and keeping it within bounds and of maintaining organisational harmony and morale are generally considered major responsibilities of the management. This line of action is based on the premise that

2. Ibid, p. 58.

productive efficiency and hence the profitability of business depends to a significant degree on the morale of workforce. Productive efficiency in this context refers not only to the performance level of workers but to labour turnover, absenteeism, grievances, strikes and every other expression of apathy or hostility that interferes with the organisation's effectiveness.

Different programmes may be introduced to reduce the discontentment among workers. But what is required is not the introduction of a number of programmes to meet the different needs of workers but the existence of "personnel spirit," in all these programmes. Every thing that management does has its impact on attitudes and on human relationships within the organisation and hence makes for greater harmony or greater conflict. Hence, personnel minded executives consider every policy and act from the stand point of how it will effect employees, whether it will make sense to them and be acceptable or whether it should be done in a different manner. Personnel practices are sure to succeed if this spirit prevails. One should proceed on the assumption that the interests of the employer and employee are fundamentally harmonious. It is true serious strife may arise at times over wages and other terms of employment but this can be prevented by more effective personnel administration including good treatment in respect of basic employment conditions. "It is now quite generally accepted that human relations programmes are never a substitute for sound economic relationships."³

B. Need for Industrial Harmony in India

India celebrated the 27th anniversary of her Independence in August 1974. The deepest aspiration of the Indian people when they attained independence in 1947 was their economic betterment. In a real sense the period following Independence has been a historical measuring rod for assessing achievement. To quote Van Dusen Kennedy, "India is unique in the history of developing nations in that she proposes to carry out an

3. Arthur Kornhauser, Robert Dubin and Arthur M. Ross, "Alternative Roads Ahead," *Industrial Conflict*, McGraw Hill Book Co. Inc., New York, 1954, p. 511.

industrial revolution concurrently with a social revolution throughout her massive population and to conduct herself to the process as a modern, twentieth century, democratic welfare state. No other nation has attempted so gigantic a development effort with such high standards of self government and public welfare.”⁴ There is an urgent need not only to husband the scarce and heavily depleted resources, but also to create new resources, new productive capacity and new wealth. Naturally “the first of the essential steps for building up an economically free and self sustaining India is large scale industrialisation at a rapid and steady growth.”⁵

Among the prerequisites for rapid industrialisation of the country, stable and harmonious industrial relations are said to be of foremost importance. In fact “industrialisation makes a universal demand; it requires a basic change in relationship between man and his work and inevitably also between man and his cultural setting.”⁶ No industrial concern can flourish under strained industrial relations. “The entire relationship must rest on mutual confidence – on the surety that what is said and done expresses, in varying degrees, an association between the manager and his employees for their mutual benefits.”⁷ Further the level of capital formation, the rate of economic growth and the level of employment are all closely related to the problems of industrial labour and management.⁸ Thus the relationships between the two

4. Van Dusen Kennedy, *Unions, Employers and Government*, P.C. Manaktala and Sons Pvt. Ltd., Bombay, 1966, p. 207.

5. Sanjivayya, D., *Labour Problems and Industrial Development in India*, Oxford & India Book House Publishing Co., New Delhi, 1970, p. 26.

6. Clark Kerr, Frederick, H. Harbison, John T. Dunlop and Charles A. Myers, “The Labour Problem in Economic Development: A framework for a Reappraisal,” *International Labour Review* (Reprint No. 1 of studies in Labour and Industrialisation issued by Inter-University Study of the Labour Problems in Economic Development), Princeton, N.J., March 1955, p. 10.

7. James H. Taylor, *Personnel Administration, Evaluation and Executive Control*, McGraw Hill Book Co. Inc., New York, 1959, pp. 219-220.

8. Wilfred Malenbaum, “How Large the Public Sector 1961-66,” *Economic Weekly*, Tenth Annual Number, Bombay, January 1959, pp. 199-202.

groups – labour and management – are vital for any economy at all times and are particularly important in a developing economy like that of India which is striving for growth. Moreover, the only capital which most of the developing economies have in abundance is the human resources. And naturally they have to make the best use of this capital resource which is entirely dependent upon the climate of industrial relations prevailing in an economy at a given period of time. Naturally this requires a situation in which requirements of management and the work force are discussed between them in a spirit of mutual trust and confidence without causing friction.

The tremendous progress made by Japan in recent years accompanied by a more or less stable wholesale price index is mainly attributed to the efforts of labour.* Complete team spirit, love of work, dedication and discipline which are the basic features of Japanese labour are found to be mainly responsible for this. The unions are organised unitwise and the disputes are settled between unions and managements without any intervention of political forces from outside. A joint consultation system has been developed. The productivity of labour has always moved ahead of wage increase and

9.* Details	Japan		India	
	1959	1969	1960-61	1969-70
GNP Japan real terms (in billion US \$)	49,900	145.30	18.705	25.640
			(at 60-61 prices)	
GNP per capita (in US \$)	408	1697	40.8	45.2
Index of industrial production	100	401.5	109.2	180.3
			(base year 1950-100)	
Gold & Foreign ex- change reserves (in billion US \$)	1.322	3.496†	0.637	0.976
Wholesale price index	100	110	100	181
Labour productivity index	100	291	Comparable	data not available

*Based on a public lecture delivered by J.H. Doshi under the auspices of the Forum of Free Enterprise in Bombay on the 22nd October 1971. The author is a past president of the Indian Merchants' Chamber, Bombay.

†After the international monetary crisis, Japan Central Bank started buying dollars and hence this figure went up by US \$ 4,587 millions in a single month at the end of August 1971, reaching a figure of US \$ 12,514 millions.

thus helped to maintain the competitiveness. Many countries including India have to imbibe the Japanese spirit of discipline and dedication to work and create a sense of belonging in everybody.

In India there does not seem to be any change of abatement of strikes. In recent days, strikes and lockouts have been common features in every industrial unit. Stagnation apart, the loss of production due to industrial disputes is considerably large in India. It was envisaged that a growth rate of 8 to 10% in industrial production would be achieved during the Fourth Plan. The performance has fallen short of these expectations. The growth rate of industrial production declined from 6.8% in 1969-70 to 3.7% in 1970-71; again increased to 4.5% in 1971-72 and is around 5% in 1972-73. The growth rate has thus been below the levels envisaged in the Fourth Plan.¹⁰ Further 31.2 million mandays were lost in 1974 as against 20.6 million mandays in 1973 reflecting thereby a 50% increase in the number of mandays lost following an increase in industrial conflict.

Wages and allowances continue to be the major cause of industrial disputes leading to loss of production. Of the 31 million mandays lost in 1974, disputes relating to wages and allowances claimed 12 million mandays. The other reasons for the deteriorating industrial relations in this country are related to variety of causes, such as bonus, provident fund, gratuity and pension, pay for night and over time work in addition to run-away increase in prices of essential commodities, grievances of worker not attended to in time and inter-union rivalry.¹¹

It is generally felt failure of Indian workers to work as hard as they could is a serious drag on industrial efficiency.¹² It is true that in many Indian plants the pace and intensity of workers' application to their jobs is low. The Indian culture has

10. Draft outline of Fifth Five-year Plan 1974-79, Planning Commission, Government of India, New Delhi, p. 131.

11. Sing V.B., "Economic Aspects of Industrial Relations," *Labour Research in India*, Popular Prakashan, Bombay, 1970, pp. 50-51.

12. Van Dusen Kennedy, *The Role of the Union in the Plant in India* (Reprint No. 83), Institute of Industrial Relations, University of California, Berkeley 4, California, 1956, p. 10.

not caused its people to be productive minded and conditions in most of the Indian industries have not changed the situation. It is also fact that many employers, due to many pressures fail to extract, higher standards from their workers. Always there are good number of workers in any industry who could increase their productive activity by sizeable percentage through more consistent and industrious application to their jobs but without over-working.¹³

Whatever be the fact, the establishment and maintenance of satisfactory relations in industry is very essential for economic prosperity of the nation.¹⁴ If the twin objectives of social justice and economic growth are to be achieved, there should be cordial relationship between employer and employees. The employees must work with zeal that can usher only from a feeling of oneness with the employer. On the other hand, employer must realise that the gains of industry is the outcome of the sweat and blood of employees and they should be shared equitably and generously with his workers.

Thus the need of the hour is of generating a new spirit, develop a patriotic and pragmatic approach and create altogether changed atmosphere and attitude towards hard and honest work. It is also high time that the labour should also feel and realise its supreme duty to maintain production and productivity at a higher level for they are co-sharers and partners in the progress of the society and country to which they belong. Labour participation in management is expected to work effectively in this direction. Trade Unions in India have still to traverse the way from "protest to participation." Their main approach should shift from that of "resistance organisation" viewing the managements as their adversaries to that of constructive organisation, viewing them as their well-wishers.

C. Changing Philosophy of Industrial Relations

The concept of industrial relations is historically the product of western liberal democratic societies which have evolved

13. Van Dusen Kennedy, *Unions, Employers and Government*, op. cit., pp. 208-209.

14. Kerr, Harbison, Dunlop and Myers, *The Labour Problem in Economic Development*, op. cit., p.6.

a capitalistic form of industry, powerful autonomous trade unions and patterns of collective bargaining between unions and employers and in which the Governments have played a greater or lesser role.¹⁵ The term 'industrial relations' refers to interaction between the three major groups on the economic scene, viz., the employers, the employees and the Government. Defined functionally the term 'industrial relations' would mean 'social relations in production.' In order to understand the functional relationships among these three groups in a more rational manner, the environment and the context within which these groups interact are also very important. The environment can be divided into three categories, viz., (i) the stage of technological development at a particular period of time; (ii) the market or economic context and (iii) the focus and the distribution of power in any society at a given moment of time.¹⁶ These environmental factors determine the degree of interactions, and the collective relationships between the groups in their efforts of achieving economic goals.

The notion of labour relations refers to different aspects of human collaboration, in organised production, relations between people seen either as individuals or as members of occupational, economic or social groups. The raw materials of labour relations include, in addition to more objective and measurable aspects, such factors as habits, prejudices, aspirations and beliefs, individual and 'collective motivation' and the degree of sympathy between individuals and groups at different levels where contacts must be established.¹⁷

Dale Yoder¹⁸ includes recruitment, selection and training of workers, as well as collective bargaining policies and practices in the term 'industrial relations.' The International Labour Organisation has however generally taken within its ambit the

15. Robert W. Cox, *Approaches to a Futurology of Industrial Relations*, International Institute of Labour Studies, 1971, p. 141.

16. John T. Dunlop, *Industrial Relations System*, Henry Holt & Co., New York, 1958.

17. *Report of the Director-General : Labour Relations, Present Problems and Future Prospects*, Report I (Part I), International Labour Conference 45th Session, Geneva, 1961 (Geneva ILO 1961), pp. 1-2.

18. *Personnel Management and Industrial Relations*, Prentice-Hall of India Pvt. Ltd., New Delhi, 1967, pp. 13-14.

matters like freedom of association and protection of the right to reorganise. According to the Indian Institute of Personnel Management 'industrial relations' include securing effective and willing co-operation from employees and reducing conflict between employer and worker and their representatives and the trade unions.¹⁹ A state of smooth industrial relations reflects the robust health of a firm approximating to the optimum levels of technology, finance, organisation, marketing and labour. The objective of good industrial relations is to facilitate production and to safeguard interests of labour and management by securing their co-operation. The existence of good industrial relations undoubtedly promotes better relations between labour and management, thereby securing the highest level of mutual understanding and goodwill among the several interests which take part in the process of production.

The philosophy of industrial relations has undergone through different stages of development. In the past importance attached to manpower was often secondary. Typically managers focused their attention upto raw materials, cost of rent, capital requirement, markets, inventions and the like.²⁰ Their orders were to be followed and not questioned. They were not concerned with the emotional and social needs or characteristics of the individual workers. Thus before the turn of this century the management of manpower was pretty much viewed for the most part as merely a hiring and firing activity.²¹ It was in this atmosphere that scientific management was born.²² During the first two decades of the twentieth century, techniques were designed to improve the ability to select employees properly and also to establish a more equitable wage structure.

19. *Personnel Management in India*. Ed. Mary Sur, Indian Institute of Personnel Management, Asia Publishing House, Bombay, 1973, p. 83.

20. Theodore A. Toedt, Lawrence C. Lovejoy, Richard M. Story Jr., Dorian Shainin, *Managing Manpower in the Industrial Environment*, W.M. C. Brown Company Inc., Dubuque Iowa, USA, 1962, p. 12.

21. Dietz J.W., "This Thing called Personnel Relations," (American Management Association, New York, 1940), Personnel Series, Vol. 45, p. 3, Robert I. Rees, *Personnel Management*, Alexander Hamilton Institute, New York, 1938, p. 134.

22. Claude S. George, Jr., *The History of Management Thought*, Prentice Hall of India Pvt. Ltd., New Delhi, 1974. p. 181.

Efforts to hold the workforce together also were initiated. During the next decade the workers grew strong, conflicts between labour and management were intense and the situation has taken further strides thereafter. Throughout the past three decades, increased recognition is being given to workforce. The industrial world has become highly complex. "Management continuously is seeking improved orderliness and methods for handling its special problems."²³ Thus during the last three decades the field of manpower management has taken a very important place. It is said that "managing manpower is the main activity of all managers."²⁴ Over the years the techniques involved in hiring and firing and the concept of labour relations have become highly advanced.²⁵ Against the above background the personality and dignity of the labour class received an appreciation in the Clayton Act of 1914 in the U.S.A. which boldly declared that "labour is not a commodity or an article of commerce." Later in 1944 the International Labour Organisation in its "Declaration of Philadelphia" stressed the need for recognition of the personality and dignity of the individual. With this, many changes have taken place in treatment of workers as human beings.²⁶ Increased sensitivity to the human responsibility received greater attention for no management can conduct its business efficiently without efficient utilisation of the human resources.

"Since management essentially consists of getting things done through the efforts of other people the type of relationship existing between people in an enterprise is the most important single factor in determining how effective the enterprise is."²⁷ The industrial effectiveness depends upon the physical and mental efforts and abilities of those who perform the productive operations. "Without human energies, skill and

23. Theodore A. Toedt, et al, op. cit., p. 11.

24. Dale Yoder, *Hand Book of Personnel Management and Labour Relations*, McGraw-Hill Book Co. Inc., New York, 1958.

25. Theodore A. Toedt, op. cit., p. 13.

26. Edwin E. Witte, *The Evolution of Managerial Ideas in Industrial Relations*, New York State School of Industrial & Labour Relations, Cornell University, Ithaca, 1953, p. 18.

27. *Personnel Management in India*, Ed. Mary Sur, op. cit., p. 83.

knowledge, natural resources are of little value.”²⁸ “Money, the best machinery and the most advanced operating method are of no avail without manpower. One of the big differences between any given company and its competitors is the caliber, quality, enthusiasm and spark of the respective workforces. Further, employee relations is the one area which is always subject to improvement, whereas in most other areas, such as finance, equipment, marketing and advertising there is little advantage that one company can obtain over another which is similarly situated.”²⁹ “An employee’s attitude towards his company, his enthusiasm for his job and his willingness to work cooperatively with his supervisor and fellow employees can result in improved productivity.”³⁰

The psychology of motivation is tremendously complex,³¹ and what has been unravelled with any degree of assurance is small indeed.³² Rewards no doubt remain the basic means of motivating a person, but frequent failures of incentives are due to the fact that the rewards may not be relevant to the employee’s paramount needs or the reward may not be worth the expected. It is a serious mistake to believe that the motivations that exist among employees are the same as management expects them to be. Management cannot rely on yesterday’s problems of utilisation of human resources. Thus in order to motivate a person it is essential to create a situation providing for incentives which will allow him to maximise the satisfaction of not one or few, but all of his needs. Therefore, it becomes necessary to understand the kinds of needs he has. Probably the most widely accepted theory of human needs is that of Abraham H. Maslow, who developed a hierarchy of needs.

28. Richard A. Lester, *Labour and Industrial Relations*, The Macmillan Co., New York, 1961, p. 74.

29. Hervert O. Eby, “A business-like approach to labour relations,” edited by Robert E. Finley, *The Personnel Man and his Job*, D.B. Taraporevala Sons & Co. (Pvt.) Ltd., Bombay, 1970, p. 223.

30. Ibid, p. 231.

31. Many studies have been conducted like Mayo and Harvard studies, the Michigan Studies, the Pittsburgh Studies, further Harvard Studies, Saul W. Gellerman, *Motivation and Productivity*, D.B. Taraporevala Sons & Co. (Pvt.) Ltd., Bombay, 1967, pp. 19-62.

32. Frederick Herzberg, “One More Time, How Do You Motivate Employees?” *Harvard Business Review*, January-February 1968, p. 53.

According to Maslow, there is a stipulated pattern³³ of the needs of man. Failure to realise this, is the reason why the management sometimes impatiently asserts that the men are never satisfied no matter how much is done for them. Many people believe that if everyone has enough to eat and to wear and to live in, they would be happy. This is a mistake, as consideration of the pyramid of man's needs will soon show. When all their needs are reasonably met, they become not only happy, but cooperative and productive.

With the increasing realisation on the part of labour about its changed condition in industrial society, and with emergence of ideas relating to political and economic democracy, Industrial relations gradually became a recognised arena of conflict and bargaining.³⁴ Now-a-days labour conflicts not only cripple significant sections of the economy but also imperil the health and safety of the people and even halt temporarily the functioning of Government.³⁵

Diversified patterns of industrial conflict have emerged in different countries. The evolution of industrial relations in any country is influenced from time to time by the changes in economic, technological, social and political organisation. Industrial relations have profoundly changed in the past 50 years and undoubtedly continue to evolve under the combined effect of technological progress and economic development. In fact, industrial relations have three important characteristic features – the first one being the close interdependence between industrial relations and their economic, social and political setting, the second one being the changing perspective of industrial relations under the impact of economic development and technological progress and the third one being the element of conflict inherent in industrial relations. However, strongly certain theories may claim that the organisation of industrial relations is based on complete unity of interests between employers and workers, or between the State and workers,

33. A.H. Maslow, "A Theory of Human Motivations," *Psychological Review*, Vol. 50, No. 14, July 1943, pp. 370-396.

34. George Spyropoulos, *An Outline of Developments and Trends in Labour Relations*, International Institute of Labour Studies, Geneva, Reprint No. 20, Vol. 99, No.3, March, 1969, p. 3.

35. Richard A. Lester, op. cit., 1961, p.3.

an examination of the true situation clearly shows that a system of industrial relations must allow for the fact that interests are often divergent, and sometimes opposed.³⁶ However, in some of the industrialised countries of the West, the weapon of strike is on the decline. But the right of strike survives and is accorded its customary veneration and is seldom utilised in practice.³⁷ It is also true that there has been a pronounced decline in strike activities throughout the world. Mandays of idleness in the late 1950's are fewer than in late 1940's or late 1930's despite the increase in population and union membership.³⁸

The latest approach towards labour management relations is the workers' participation in management which provides a solid foundation for building up new attitudes and institutions. Workers' participation has been "on the crest of legislative wave in most industrialised countries, in recent years."³⁹ It has been thought of as the best solution for harmony and peace in any Industry and for increasing productivity of any concern.

D. Evolution of Industrial Relations in India : Five-Year Plans

The course and character of Industrial relations in India are very much influenced by the Government policy. To this end, "it has used legislation, administrative action, tripartite consultation, persuasion and education."⁴⁰ Before Independence the development of Industrial relations has been shaped by the attitudes and interests of foreign colonial Government, foreign employer and Industrial relations were treated, by and large, as

36. Georges Spyropoulos, op. cit., 1969, p. 4.

37. The drop in the number of strikes has been associated with the initiation of the process of economic development. See Arthur M. Ross, "Changing Patterns of Industrial Conflict" Allan Flanders edited, *Readings in Collective Bargaining*, Penguin Books Ltd., Harmondsworth, 1969, p. 161.

38. Ibid, p. 162.

39. Douglas Soutar's Presidential Address, *Co-determination, Industrial Democracy and the Role of Management*, Industrial Relations Research Association Series, Proceedings of the Twenty-sixth Annual Winter meeting, December 1973, New York, p. 2.

40. Van D. Kennedy, *The Sources and Evolution of Indian Labour Relations Policy*. IJIR (Reprint Series No. 1), Sriram Centre for Industrial Relations, New Delhi, 1965, p. 1.

law and order problems.⁴¹ On the eve of Independence, India inherited a framework of labour law that might be called typical of an enlightened colonial regime. This legislation contained no provisions to give any shape or direction to the growth of unionism and collective bargaining. The only controls, to speak of, were aimed at preventing strikes. The role of Government was that of paternalistic, assuring minimum employment conditions to workers and deciding the merits of labour disputes.

After Independence, the national Government promising a fair deal to the working class passed a number of labour laws conferring rights and benefits on industrial workers. Minimum Wages Act, Employees' State Insurance Act, Amendments to the Factories Act, Industrial Disputes Act, introduction of labour welfare fund for workers in plantation and mines were all instances in this direction. Harmony in Industrial relations is one of the most consistent key note of policy statements and speeches since 1947. This is subscribed to by almost all shades of opinion as a practical application of Gandhi's doctrine of truth and non-violence." Further "it is the belief that in a society committed to socialistic objectives the interests of labour and management are mutual and that recourse between them to antagonistic attitudes, conflict and, by implication coercive methods is contrary both to Indian moral and political principles."⁴² But Industrial relations being a concurrent subject, both the Central and the State Governments have passed legislative measures, regulating the relationship between employers and employees. This resulted in multiplication of labour laws at the central and the state levels, dealing with the same issue.

The goals and objectives of national government are said to have been laid down in the five-year plans. The First Five-Year Plan mentioned "it is incumbent on the State to assume itself with legal powers to refer disputes for settlement by arbitration or adjudication. However, the endeavour of the

41. Ramesh C. Goyal, *Post-War Trends in Industrial Relations in India*, The Eastern Economist, New Delhi, 1955.

42. Van D. Kennedy, *The Sources and Evolution of Indian Labour Relations Policy*, op. cit., p. 24.

state has all along been to encourage mutual settlement, collective bargaining and voluntary arbitration to the utmost extent and thereby reduce the minimum occasion for its intervention.”⁴³ However, the statement of objectives was rather general and it has been rightly commented that “it attempts to state broad principles and in doing so deals with so many themes and professes to find harmony and feasibility among such a diversity of purposes that it betrays either inadequate understanding of labour relations or a conscious use of sweeping generalisation to cover Government in-decision and disagreement.”⁴⁴

The Second Five-year Plan makes no basic change in the vagueness that has crept into the labour policy of the First Five-year Plan. It only stresses the increased association of labour with management by providing for joint councils. The plan, of course, suggests to make some statutory provision for recognition of unions, keeping in mind, the desirability of having one union in one industry. Thus even during the second plan period, India maintained the same legal framework which she had inherited and only the lip sympathy was paid to collective bargaining. But, the important break-through in the policy of industrial relations was frequent consultations among employers and government. Code of discipline, model grievance procedure, code of conduct have come into existence during this period. The institution of wage boards was started in 1957. The Second Central Pay Commission has submitted its report during the second plan period.

The Third Five-year Plan has given central role to the code of discipline and envisages the replacement of adjudication by voluntary arbitration and by extending the scheme of workers’ participation in management. “A major programme for the period of the Third Five-year Plan will be progressive extension of the scheme of Joint Management Councils to new industries and units so that, in the course of few years it may

43. *The First Five-year Plan – A Draft Outline*, Planning Commission, Government of India.

44. Van D. Kennedy, *The Sources and Evolution of Indian Labour Relations Policy*, op. cit., p. 7.

become a normal feature of the industrial system.”⁴⁵ With the recommendations made by the Bonus Commission, the issue of bonus has been given a legislative support for the first time during the period of Third Five-year Plan.

A close examination of these developments during the first two decades of post-independence period shows that during the earlier period 1947–56, policy statements lacked direction showing little understanding of union management relations. But during the period 1957–64, Government has had well-defined labour relations objectives and has been vigorous in pursuing them, although by non-legislative means. In addition, it has also shown a much clearer awareness of what an orderly system of collective bargaining is.

But by 1965, again the future course of Indian industrial relations policy has become uncertain. The code of discipline came to be freely violated by both sides, the scheme of workers’ participation in management failed to spread or show much success where it was tried, employers resisted the use of voluntary arbitration and continued union rivalries discouraged the spread of orderly union management relationship.⁴⁶

The Fourth Five-year Plan summarised the objectives of Government Policy in regard to industrial relations by saying “in the field of industrial relations priority will be accorded to the growth of a healthy trade union movement, the promotion of collective bargaining and the raising of productivity through labour management co-operation.”⁴⁷ The approach to the Fifth Five-year Plan rightly mentioned “inadequacies of management and bad industrial relations are among the most important factors for delay and inefficiency in implementation of projects and underutilisation of capacity.”⁴⁸

Thus the successive Five-year plans no doubt have indicated—that the Government policies aimed at promoting a

45. *The Third Five-year Plan*, Planning Commission, Government of India, New Delhi.

46. Van D. Kennedy, *The Sources and Evolution of Indian Labour Relations Policy*, op. cit., p. 22.

47. *The Fourth Five-year Plan*, Planning Commission, Government of India, New Delhi.

48. *An Approach to the Fifth Five-year Plan*, Planning Commission, Government of India, New Delhi, January 1973, p. 60.

strong trade union movement; laying more emphasis on voluntary collective bargaining and in raising productivity. But they have not clearly spelt out how these objectives are proposed to be achieved. Further the results of the steps taken during the last two decades have not been so much encouraging. The fragmentation of the trade union movement has further increased.⁴⁹ The legislative enactments—The Indian Trade Union Act and Industrial Disputes Act—the pronouncements by labour courts and tribunals and the labour policy of the Government—all seem to have led to many undesirable and conflicting developments. The Government policy has been characterised as “a complex mix of various techniques: compulsory regulation, encouragement to voluntary settlements, emphasis on promoting a tripartite consensus, direct wage-control through centralised authority, more decentralised control through tribunals and tripartite norms, etc.”⁵⁰ The National Commission on Labour appointed in 1966 went into the question of labour policies and industrial relations and come up with a large number of conclusions and recommendations relating to industrial relations. But even after 4 years of publication of the report of National Commission, the Ministry of Labour observed⁵¹ that “some of the major recommendations of the Commission like recognition of trade unions, machinery for settlement of industrial disputes, etc., could not be implemented due to lack of consensus among the trade unions.”

49. Published data revealed that while there were two all-India Federations before 1947, the number rose to six in 1965, and to eight in 1972. The average membership of each trade union has come down from 781 in 1951-52 to 546 in 1965.

(a) *The Indian Labour Year Book*, Ministry of Labour and Employment, Government of India, New Delhi, 1972.

(b) *Indian Labour Statistics*, Ministry of Labour and Employment, Government of India, New Delhi, 1972 and 1973.

(c) *Report of the National Commission on Labour*, Government of India, Ministry of Labour and Employment and Rehabilitation, 1969, pages X, XI, XII, XIII, XIV.

50. Charles A. Mayers and S. Kannappan, *Industrial Relations in India*. Asia Publishing House, Bombay, 1970.

51. *Indian Labour Journal*, Twenty-sixth Year of Independence—World in the Labour Field, Ministry of Labour & Employment Government of India, New Delhi, September 1973, p. 128o.

At present, the industrial relations scene in the country presents "a very curious mix of legal regulations and voluntary institutions coupled with fragmentation of unions, and political polarisation of the trade union movement and as a result of the complexity of these phenomena, there seems to be utter confusion."⁵² The number of industrial disputes and mandays lost have been increasing from year to year.⁵³ The effects of this situation are stagnation in industrial production both in public and private sectors, existence of unutilised installed capacities in most of the industries and acute shortages of essential basic materials like steel, cement, fertilisers, power, etc. Consequently even after two and half decades India is still in quest of industrial harmony and is in search of a dynamic industrial relations policy, which promotes both productivity and real incomes of workers. Under these circumstances, India's urgent need to maximise output and achieve higher rates of economic growth has intensified interest in industrial peace as a means to continuity of production.

E. Public Sector and Industrial Relations

The field for the public sector in India has been well demarcated by the Industrial Policy Resolution in 1956. The

52. Goyal, R.C., *Industrial Relations in a Mixed Economy*, Forum of Free Enterprise, Bombay, 1973.

53.

Year	Number of Disputes			Number of Mandays lost ('000)		
	Strikes	Lock-outs	Total	Strikes	Lock-outs	Total
1961	1,240	117	1,357	2,969	1,950	4,919
1962	1,361	95	1,491	5,059	1,062	6,121
1963	1,364	107	1,471	2,229	1,040	3,269
1964	1,981	170	2,151	5,724	2,001	7,725
1965	1,697	138	1,835	4,617	1,853	6,470
1966	2,353	203	2,556	10,377	3,469	13,846
1967	2,433	382	2,815	10,565	6,583	17,148
1968	2,451	325	2,776	11,078	6,166	17,244
1969	2,344	283	2,627	15,477	3,571	19,048
1970	2,598	291	2,889	14,749	5,814	20,563
1971	2,478	274	2,752	11,803	4,743	16,546
1972*	2,530	382	2,912	11,794	6,127	17,921

The above table gives the number of Industrial Disputes and the number of mandays lost during the period from 1961 to 1972.

Source: Indian Labour Statistics, 1973, Labour Bureau, Department of Labour and Employment, Ministry of Labour and Rehabilitation, Government of India, p. 152.

size of the public sector has grown so large that soon it will become the dominant sector.⁵⁴ The Planning Commission stated that although socialism will not involve complete nationalisation of the means of production or elimination of private agencies in agriculture or business or industry it does mean “a progressive widening” of the public sector and a reorientation of the private sector to the needs of planned economy.

In a developing economy like India which is wedded to a socialistic pattern of society with large public sector the state of industrial relations and the resultant morale effecting higher productivity and production in individual enterprises are of great importance. This is particularly of paramount importance in public sector as it has been assigned a leading role in Indian economy. This will enable it to work effectively and competitively and thereby to take charge more and more of the commanding heights in the production and distribution of basic and consumer goods. Further the demand for extension of public ownership has come in a large part from the trade unions as the latter expect a better treatment, from the former. The public sector is expected by workers and unions to function as a ‘model employer.’⁵⁵ Therefore, it is in the interests of everyone to see that public sector not only works but works well. Unfortunately, however the performance of the majority of public sector enterprises to date has been disappointing. Service in the public sector has not evoked the urge for service or of belonging to the concern. The problems of industrial relations have become more acute in the public sector in recent

54. The following table shows the share of public sector in total investment during the five-year plan periods :

Plan	Total investment	Investment in Public Sector (Rs. in Crores)	Percentage of Investment in Public Sector in total investment
First Five-year	3,360	1,560	46.4
Second Five-year	6,750	3,650	54.0
Third Five-year	11,600	7,500	65.0
Fourth Five-year	24,882	15,902	64.0
Fifth Five-year	45,315	29,745	64.0

55. National Commission on Labour, op., cit., p. 364.

years. Frequent work stoppages⁵⁶ due to labour troubles have not only effected labour and management but also slowed down the pace of economic growth thus posing a threat to the policy of rapid industrialisation of the country. It may be noted here a country however rich it might be in its natural resources, if it fails to utilise its human resources to the maximum it will never be able to compete with other developed or developing nations.

The basic aim of labour policy in public sector as evolved by the successive Five-year plans was to have a cooperative and contented labour force. The First Five-Year Plan declared that the endeavour of the state has all along been to encourage mutual settlement, collective bargaining, and voluntary arbitration to the utmost extent. The workers' right of association is to be accepted without reservation as the fundamental basis of mutual relationship. Works Committees for the settlement of differences on the spot between the workers and management are to be set up.⁵⁷ The Second Five-Year Plan while emphasising stating that labour legislation and the enforcement machinery set up for its implementation can only provide a suitable frame work in which employers and workers can function, states that the best solution to common problems can be found only by mutual agreements.⁵⁸

The Third and Fourth Five-Year Plans envisaged further extension of the participation of labour in management. In the

56. Mandays lost per worker in the public sector :

Year	Total number of mandays lost (in millions)	Mandays lost per worker
1967	2.5	0.26
1968	2.0	0.20
1969	1.4	0.14
1970	2.0	0.20
1971	2.2	0.21
1972	3.3	0.30
1973	3.3	0.27
1974	7.7	0.61

Source : Research Bureau, The Economic Times, 1975 March 22, p. 4.

57. *First Five-year Plan*, Planning Commission, Government of India, New Delhi, 1953, pp. 573–576.

58. *Second Five-year Plan*, Planning Commission, Government of India, New Delhi, 1956, p. 574.

Fifth plan unlike in the past a close correspondence is sought to be established between the Fifth plan and the long range objectives. There is thus almost for the first time a recognition that industrial relations' situation is at the heart of the programme of self-reliance and removal of poverty.

Hindustan Shipyard being one of the biggest public sector undertakings with paid-up capital of Rs. 1,089.97 lakhs as on 1973-74, has come to occupy an important place in the economy of the country. Hence it would be worth-while to examine the nature and structure of industrial relations, their consequences and the reasons therefor, with a view to suggest some useful guidelines which may be followed in strengthening the harmony between the management of the Shipyard and its employees, so as to enable them to contribute their maximum to the economic prosperity of the nation as a whole.

SHIPBUILDING INDUSTRY IN INDIA

A. Importance

Shipbuilding industry has been recognised all over the world as an integral part of national infrastructure development programme. Every nation seeks to expand its shipbuilding and shipping tonnage, thereby improving her foreign trade resulting in more favourable balance of trade. The existence of adequate national shipping — rightly acknowledged as a vital cog in the economic wheel of every country—eliminates the necessity of depending on foreign shipping lines. For, the dependence on foreign ships adversely affects the export efforts, increases the cost of their transportation and deprives the country of its foreign exchange. A country would not be able to negotiate and execute large and long term sale contracts without owning large bulk carriers. Further, in an emergency or during hostilities, foreign trade which relies on foreign shipping may find itself in jeopardy. The development of national shipping eliminates critical dependence on this vital link in the country's economy apart from becoming a major contributor to the balance of payments.

Further every maritime country having a coastline of its own has recognised the importance of coastal shipping in strengthening its economy. Being a cheap form of transport well suited for the carriage of bulk cargoes from port to port, coastal shipping helps to foster and develop the domestic trade of the

country. Being employed in domestic waters, it is easily available in times of war or any national emergency. It provides employment to a large number of workers both on the sea and shores. It also supports a range of ancillary industries like chandelery, bunkering, marine insurance, etc. Besides, it provides a gaining ground for the country's overseas shipping and also forms an important link with the overseas service for the coast-wise distribution of supplies received from abroad. Coastal shipping is thus one of the most valuable assets of a maritime country.

B. Demand for Ships

The demand for new ships is a highly complex phenomenon, depending upon the trend in marketable surplus and demand for various commodities, technological developments, changes in freight rates, the retirement rate of obsolete vessels, the changes in navigational routes, etc. It may be noted here the closure of the Suez Canal in 1967 made 'non-sense' of all pre-1967 forecasts, and the reopening of the Suez Canal would similarly make 'non-sense' of existing forecasts of world demand for ships. The energy crisis, the possible breakdown of the international currency system, etc., are bound to have their effect on the demand for ships. During the period 1960-72, while the growth rate of international maritime shipments was 9% per annum, the world's fleet of ships has grown at an annual rate of 5.2%. The difference in growth is explained by the growth in fleet efficiency (i.e., fewer idle ships, bigger and newer ships, replacing less efficient old ships, etc.). The global demand for ships is shown in Table 2.1. The world shipbuilding order book by the end of 1973 has more than trebled since early 1968 (from 40.6 million gross tons to 128.90 million tons). Most of the increase in the demand is found in the case of tankers (more than four times' increase) and bulk carriers (nearly doubled). The demand for general cargo vessels has gone down from 6.33 million tons gross to 5.75 million tons gross during the period. Thus the shipbuilding industry has boomed with phenomenal increase in orders especially during 1973.

C. Indian Shipping Tonnage

In respect of India's foreign trade, shipping is the vital

TABLE 2.1

WORLD'S DEMAND FOR SHIPS

(Millions of tons gross)

Year (at the end of fourth quarter)	Total tonnage on order	Tankers on order	Bulk carriers on order	General Cargo vessels on order
1968 I quarter	40.58	22.42	9.58	6.33
1968 IV quarter	48.91	27.64	11.01	7.65
1969 "	59.83	30.52	17.19	9.00
1970 "	78.50	37.87	26.26	10.01
1971 "	83.66	45.31	24.55	8.95
1972 "	86.50	57.74	18.36	5.77
1973 "	128.90	97.56	18.45	5.75

Source: Lloyd's quarterly reports.

link to world markets because 98% of her exports and imports move by maritime transport.¹ Further India has a long coastline extending over 3,000 miles having access to sea on three sides. The importance of coastal shipping to India needs, therefore, no emphasis. But from the very beginning, the Indian Shipping Industry has developed in an international environment and in competition with the world shipping industry. It could be seen from Table 2.2 that on the eve of Independence, India had a fleet of 59 ships of 1.92 lakhs of gross tons, most of which were employed in the coastal and adjacent trades. However Indian shipping carried only one-third of the coastal trade then. During the post-independence period considerable effort has been made to augment the shipping tonnage. Through the successive five-year plans the Government of India set up targets for the development of Indian shipping which have been largely realised or even exceeded, as can be seen from the same table. The Indian shipping fleet has grown to 293 (consisting of coastal and overseas) of 36.36 lakh gross registered tons by January, 1975. During the Fifth Five-year Plan the target is fixed at 96.4 lakh gross tons including 10 lakh gross tons on order. Constitution of the shipping Development Fund,² entry of public sector in shipping³ and development of adequate technical and managerial expertise and competent and qualified personnel to man the

1. Sarangan, T.K., "Some Important Issues of Shipping in India," *Indian Shipping*, Journal of Indian National Shipowners Association, Bombay, February 1974, p. 11.

2. The Government of India constituted in 1958 a special revolving fund called the shipping development fund, so as to provide liberal rupee loans varying between 75% to 95% of the price of ships to Indian shipping companies at a concessional rate of interest. The interest rate was as low as 3% until 1st April 1971 when it was increased to 4½%. By the end of 1971 the shipping development fund committee had sanctioned loans totalling Rs. 442.38 crores out of which Rs. 167.93 crores had already been disbursed. This has helped the Indian shipowners in acquiring ordering as much as 27.26 lakh GRT.

3. In the context of the highly capital intensive nature of the shipping industry, the Government of India felt that without the assistance of the Government it would be difficult to achieve an accelerated growth of Indian Shipping. It was in this background, that the Government of India set up two shipping corporations in the public sector, viz., The Eastern Shipping Corporation and the Western Shipping Corporation in 1950 and 1956 respectively. On the 2nd October 1961, these two companies were merged to form the Shipping Corporation of India. The Corporation starting with a small fleet of 19 ships of a total GRT 1.39 lakhs constituting about 15% of the Indian tonnage then has expanded its fleet to 119 vessels in March 1975 with another two million DWT tons on order.

TABLE 2.2
GROWTH OF INDIAN MERCHANT FLEET SINCE 1947 THROUGH PLAN PERIODS

	Number of ships (coastal and over- seas)	Total Tonnage		Plan Target
		In opera- tion	On order	
As on 15th August 1947	59	1.92	—	—
As on 1st April 1951	94	3.72	—	—
As on 31st March 1956	126	4.80	1.20	6.00
As on 31st March 1961	172	8.58	0.65	9.02
As on 31st March 1966	221	15.40	5.00	13.25
As on 28th February 1967	236	18.67	—	—
As on 28th February 1968	234	19.07	—	—
As on 28th February 1969	252	21.29	—	—
As on 28th February 1970	258	23.29	—	—
As on 28th February 1971	252	24.57	—	—
As on 31st March 1972	256	25.09	14.32	—
As on 31st March 1974	NA	30.00	10.60	40.00*
As on 1st January 1975	293	36.36	NA	96.40 @

NA = Not Available

* Including five lakh tons on order

@ Including 10 lakh tons on order

Source : (i) India's Shipping and Transport, Third Asain International Trade Fair, 1972.
(ii) Indian Shipping.

growing fleet' are said to be the three important factors contributing to the growth of Indian merchant fleet during the post-independence period. With this, Indian shipping has now reached the stage of carrying around 20% of India's overseas trade. Indian shipping lines are now operating in most of the overseas trade routes between India and U.K. other European countries, U.S.A., Canada, Japan, Australia, U.S.S.R., West Asia, East Africa, Malaysia, etc. They also operate in tramp trades carrying bulk cargoes. Thus India has emerged as a significant maritime country, but ranks only 16th representing about one per cent of world shipping tonnage. The percentage share of India in world tonnage is shown in Table 2.3.⁵ It could be seen from Table 2.3 that the Indian gross tonnage has increased by more than 11 times from 1948 to 1974 and the world tonnage has increased only by more than three times during the same period. In spite of the spectacular increase in the Indian gross tonnage, the percentage of Indian tonnage to world tonnage has not increased much. It has gone up from 0.39% in 1948 to 1.06% in 1970 and then declined to below 1% in the years 1972 and 1973 and again it has increased to 1.11% in 1974. The top seven maritime nations of the world own over 80% of the tonnage. India is rated as second maritime nation after Japan in Asia. But Japan has 35 million GRT whereas India has only 3.5 million GRT (as per Lloyd's figures) as on 1st July 1974.

Further in spite of the continuous increase in Indian shipping tonnage (as already shown in Tables 2.2 and 2.3), the share of Indian ships in the carriage of cargoes in India's overseas trade has declined in the last two years 1970-71 and 1971-72 as could be observed from Table 2.4. It is true that the volume of cargo handled by Indian ships has increased from 1.168

4. Realising the need to impart necessary training to the officers and seamen to operate the growing merchant fleet, a number of training institutions have been set up by the Government of India.

5. It may be noted that the difference with regard to the number of Indian ships and their tonnage between the figures shown in this table and those of Table 2.2 arises from the fact that the figures in this table furnished by Lloyd's include vessels like ferries, passenger vessels, tugs, dredgers, cable ships, research ships, etc., which are excluded from the figures given (by the Government of India) in Table 2.2.

TABLE 2.3

WORLD AND INDIAN SHIPPING TONNAGE 1948-1974
(STEAM AND MOTOR SHIPS)

As on 1st July	World Tonnage		Indian Tonnage		
	Number of ships	GRT	Number of ships	GRT	Percentage share in world tonnage
1948	29,340	80,291,593	151	315,308	0.39
1949	30,248	82,570,915	165	394,488	0.48
1950	30,852	84,583,155	177	420,328	0.50
1951	31,226	87,245,044	175	451,995	0.52
1952	31,461	90,180,359	192	476,683	0.53
1953	31,797	93,351,800	195	487,707	0.52
1954	32,358	97,421,526	204	512,706	0.53
1955	32,492	100,568,779	221	569,718	0.57
1956	33,052	105,200,361	215	580,456	0.55
1957	33,804	110,246,081	222	625,441	0.57
1958	35,202	118,033,731	230	673,678	0.57
1959	36,221	124,935,479	238	749,711	0.60
1960	36,311	129,769,500	257	858,916	0.66
1961	37,792	135,915,958	273	955,441	0.70
1962	38,661	139,979,813	278	1,012,866	0.72
1963	39,571	145,863,463	309	1,211,139	0.83
1964	40,859	152,999,621	347	1,448,237	0.95
1965	41,865	160,391,504	354	1,522,693	0.95
1966	43,014	171,129,833	360	1,794,554	1.05
1967	44,375	182,099,644	369	1,886,513	1.04
1968	47,444	194,152,378	383	1,945,037	1.00
1969	50,276	211,660,893	397	2,238,344	1.06
1970	52,444	227,489,864	399	2,401,656	1.06
1971	55,041	247,202,634	397	2,478,031	1.00
1972	57,391	268,340,145	412	2,649,677	0.99
1973	59,606	289,926,686	430	2,886,595	0.99
1974	61,194	311,322,626	451	3,484,751	1.11

Note : Ships of 100 tons gross and above are included.
Source : Lloyd's Register of Shipping Statistical Tables, 1974.

TABLE 2.4
SHARE OF INDIAN SHIPPING IN THE CARRIAGE OF
INDIA'S OVERSEAS TRADE

(In '000 tons)

Year	Total Tonnage of India's Overseas Trade	Volume of India's Overseas Trade carried by Indian ships	Percentage share of Indian ships
1955-56	16,538	1,168	6.5
1960-61	22,284	2,210	9.0
1961-62	20,618	2,604	11.2
1962-63	30,780	2,830	8.2
1963-64	30,250	3,592	10.3
1964-65	36,433	4,642	11.4
1965-66	37,398	5,538	12.9
1966-67	40,890	6,217	13.2
1967-68	42,063	7,728	15.5
1968-69	42,769	9,573	18.3
1969-70	48,523	10,481	22.7
1970-71	52,541	10,384	19.9
1971-72	54,466	8,994	16.5

Source : (i) Indian Ports and Shipping Statistics. Transport Research Division, Ministry of Shipping & Transport, Government of India, 1970 (upto 1968-69).
(ii) P.T. Dalal, The Economic Times, November, 1973, p. 5 (1969-70 to 1971-72).

million tons in 1955-66 to 8.994 million tons in 1971-72. But this increase was more than offset by the increase in the total volume of India's overseas trade. Consequently, the percentage share of Indian ships in the carriage of India's overseas cargo has declined from 22.7 in 1969-70 to 16.5 in 1971-72. This decline in the last two years was attributed to the increase in participation of Indian ships particularly tankers and bulk carriers in international cross trades.⁶

As could be inferred from the information given above. India has to depend upon foreign shipping to carry more than 80% of her overseas trade thus resulting in an outflow of

6. It may be noted here the freight earned in cross trades by Indian ships has increased from Rs. 13.10 crores in 1969-70 to Rs. 28.42 crores in 1971-72. This excludes charter hire earned from foreign parties which has also gone up from Rs. 11.41 crores to Rs. 18.29 crores during the same period (Director-General of Shipping, Bombay, *Indian Shipping*).

Rs. 180 crores worth of foreign exchange annually. Further, coastal shipping which is acknowledged alround as an important integral and coordinated part of the country's domestic transport net work is almost on the brink of extinction. The strength of the coastal fleet has progressively diminished from 4 lakhs GRT in 1964 to 1.9 lakhs GRT in 1973 and the existing fleet is not adequate even to meet the requirements of coal traffic at a time when the country's need for its services is observed to be quite pressing. Hence adequate measures need to be taken to further develop the Indian tonnage.

It is proposed to expand our shipping tonnage so as to carry 50% of India's overseas cargo and 100% of coastal cargo by the end of 1978-79.⁷ It is also envisaged that the coastal shipping will be utilised to a greater extent during the five year period 1974-79 than in the past, for the carriage of some 6.5 million tons coal in coastal and adjacent trade with salt (500,000 tons), cement (150,000 tons) and wheat (100,000 tons) as return cargo.

It has been estimated that India's overseas cargo traffic is likely to grow in the next five years at the rate of 8% per annum.⁸ The statistics provided by the United Nations and Euro-economics Research Organisation, for 1972 suggest that there has been 3% increase in the efficiency in the merchant fleet of the world. Assuming that this would apply to the Indian merchant fleet also, India's overseas fleet requirement for the next 15 years has been estimated as follows :

At the end of	Requirement on the basis of 50% share of total overseas cargo traffic (in million GRT)	Requirement on the basis of 50% share of overseas cargo traffic and 100% share of coastal traffic (in million GRT)
1978-79	7.76	8.54
1983-84	9.90	10.89
1988-89	12.63	13.89

7. Cargo-wise break-up figures are 100% of overseas trade in oil, 50% of iron ore export to Japan, 100% iron ore export to Europe and about 50% of the liner trade in other commodities.

8. Report of the British Consultants Team (Hindustan Shipyard Study, Visakhapatnam, Phase I, Vol. 3, Economic Appraisal) under assignment by the Overseas Development Administration of the British Government, March 1973, pp. 4-13.

The target set for the five year period 1974-79, 8.64 million GRT operative and 1.00 million GRT on order – corresponds to the estimated requirements. This increase of tonnage is no doubt a great leap forward, but this calls for meticulous planning, mobilisation of resources on a greater scale and continuous follow-up and constant review of the efforts and results.

If Indian shipping has to expand and compete with the rest of the world, Indian shipping companies will have to modernise their fleet and also go in for larger vessels as bigger vessels are the order of the day. In fact the rate of growth of size and structure (type and design) of global tonnage is fast increasing in conformity with the continuous quest for achieving rapid handling of cargoes, increasing speed of transportation and lower operational costs. In 1950 a 20,000 DWT vessel was considered as very large, but by 1970's, i.e., within 20 years vessels of 200,000 DWT and more (more than 10 times in size), are in regular service all over the world and are considered medium-sized. The operational cost of these larger vessels was found to be low.⁹ It is no wonder, therefore, that the trend is towards acquiring bigger and bigger ships.

The following table shows the average carrying capacity of the various types of ships delivered by world ship builders over the past five years :

Type of Ship	Capacity (DWT)
Cargo ships	15,000
Container ship	18/22,000
Crude Oil carriers (VLCC'S)	170,000
Product carriers	23/30,000
Coastal tankers	5,500
Specialised tankers (e.g. Chemical Carriers)	10,800
Liquid gas carriers (LNG'S)	21,000
Ore/Bulk/Oil carriers	70/121,00
Ore carriers (Ore/Oil)	75/145,000
Ore carriers	37/98,000
Bulk Carriers	30/40,000

9. The calculations showed that whereas a 20,000 DWT tanker costs \$300 (Rs. 2,250) per DWT, a 200,000 DWT Vessel required only \$75 (Rs. 562) per DWT.

The capacity of different types of ships confirms that the dimensional trend is continuing upwards. Table 2.5 shows size-wise analysis of Indian and world fleet. This table shows that while one-fourth of the world fleet falls in the ranges above 60,000 tons gross, only 5.68% of the Indian fleet occupies these higher ranges. More than two-third of the Indian fleet fall within the group of above 4,000 and below 30,000 tons gross. In the case of world fleet this group accounts for only 47% of the total tonnage. While India has only 28% of its fleet with more than 30,000 tons gross, in the case of world fleet there were more than 40% belonging to this category. Although the average size of world fleet (5,087 tons gross) is less than that of Indian fleet (7,726 tons gross) it should be noted in this context that the average size of the world fleet would have been much larger but for the inclusion of large number of small fishing vessels. This analysis unmistakably reveals a large percentage of Indian vessels are of smaller size, compared to world fleet. This suggests the need for acquiring ships of larger tonnage.

The Indian shipping firms, who operate mostly the 'liner-trade' are also anxious to acquire bigger ships as could be observed from the following orders placed by the Shipping Corporation of India and Great Eastern Shipping Company.

Owners	DWT of ship	Type of ship	Number of ships on order
Shipping Corporation of India	1,15,000	Tanker	2
"	1,26,000	Bulk Carrier	1
"	1,08,000	O-B-O	2
Great Eastern Shipping Co.	1,00,600	O-B-O	1

Further, on the 5th April 1973, India entered the VLCC (Very large crude carrier) age with the ordering of the 2,69,000 DWT tankers by the Shipping Corporation of India with the Uljanik Shipyard at Pula in Yugoslavia.¹⁰ Thus there are in-

10. "India Enters VLCC Age in Shipping," *Indian Shipping*, Vol. XXV, No. 3, March 1973, p. 3.

TABLE 2.5
SIZE-WISE ANALYSIS OF INDIAN AND WORLD TONNAGE

Tonnage Division (Tons Gross)	Indian Fleet			World Fleet		
	Number of ships	GRT	Percentage to total tonnage	Number of ships	GRT	Percentage to total tonnage
Below 1,000	137	49,979	1.43	36,134	12,068,086	3.88
1,000 to 3,999	69	143,207	4.10	9,810	22,418,897	7.20
4,000 to 6,999	75	452,061	12.97	3,431	18,711,557	6.01
7,000 to 9,999	82	704,580	20.22	3,745	32,087,474	10.31
10,000 to 14,999	29	341,867	9.81	3,199	38,025,499	12.21
15,000 to 19,999	11	177,185	5.08	1,479	25,300,387	8.12
20,000 to 29,000	28	652,083	18.72	1,300	31,181,914	10.01
30,000 to 39,999	5	169,603	4.87	725	24,696,698	7.93
40,000 to 49,999	6	276,912	7.95	357	15,833,564	5.09
50,000 to 59,999	6	319,389	9.17	240	13,101,869	4.21
60,000 and above	3	197,885	5.68	774	77,896,681	25.03
Total	451	3,484,751	100.00	61,194	311,322,626	100.00

In World Fleet the size would have been much larger but for the inclusion of a large number of small fishing vessels.

dications that in future, vessels of more than 2,00,000 DWT size will be running under the Indian flag as negotiations are already under way for the procurement of vessels of this size by Indian Shipowners. They are, in fact, reluctant to place orders for smaller ships which are currently being built in India.¹¹ Hence, Indian Shipyards not only should increase their production but should also construct larger ships to meet the latest demand.

Table 2.6 shows a comparative picture of age-wise analysis of Indian and world fleet, as per the figures given by Lloyd's Register of Shipping Statistical Tables 1974. Ships of over 20 years which have become due for replacement account for about 6.83% and 10.42% of existing Indian and world tonnage respectively. Ships of 15 to 19 years of age which will become due for replacement during the next five year period account for 13.25% and 11.67% respectively. Over 64% of the Indian fleet is less than 10 years of age and this may be compared with Japan which has the most modern fleet of the principal maritime countries with above 85% being less than 10 years old. The extent to which Indian shipping is over-aged is evident from the fact that nearly one-fifth of the total number of ships are more than 20 years old. These over-aged ships will have to be scrapped and replaced immediately by new ships.

To achieve the target of shipping tonnage so as to carry about 50% of maritime trade. India has to address herself with confidence and devotion during the next ten years. If India's tonnage is not developed further, the drain upon her foreign exchange resources would become more and more substantial with the increasing volume of trade. Further shipping is generally regarded as a handmaid of one's own overseas trade. But the fact that the shipping itself is an export industry and can make direct contribution to economic growth of India by earning foreign exchange is often ignored. In fact, exports of

11. The Hindustan Shipyard, Visakhapatnam has now reached a stage of development of accepting orders for completely Welded general cargo vessel upto 15,000 DWT and bulk carriers upto 25,000 DWT. Mazagon Dock is capable of building medium-sized passenger cargo ships. Currently, Garden Reach Workshop is engaged only in the construction of dredgers, other harbour craft and naval requirements (S. Balakrishna Shetty, *The Economic Times*, 1973, January 1971, p. 9).

TABLE 2.6
AGE-WISE ANALYSIS OF INDIAN AND WORLD TONNAGE

Age Division in years	Indian Fleet		World Fleet	
	Number of ships	GRT	Percentage to total tonnage	Number of ships
				GRT
				Percentage to total tonnage
0 - 9	200	2,247,989	64.51	27,405
10 - 19	156	998,681	28.66	19,787
20 - 29	54	181,041	5.19	8,004
30 and above	41	57,241	1.64	5,998
Total	451	3,484,751	100.00	61,194
				311,322,626
				100.00

Source: Compiled from Lloyd's Register of Shipping Statistical Tables, 1974, pp. 16 and 28.

shipping services as compared with exports of visible goods have many advantages from the point of view of earning foreign exchange.¹² Further the long coast line and her geopolitical position in the Indian ocean naturally makes heavier demands on naval fleet in future. Defence of national merchant fleet, off shore resources including fishing and oil supply lines demand that the country expand its naval fleet for better command and control of the surrounding seas.

D. Case for Expansion of Indigenous Shipbuilding Industry

The required additional tonnage of merchant as well as naval fleet can be obtained either by developing the shipbuilding industry at a faster rate or by buying ships from abroad. From a long term point of view it is always advisable to rely on the first alternative rather than the second. Shipbuilding industry is labour intensive in character and will continue to be so for a number of years to come inspite of rapid technological advances, as it is fundamentally an assembly industry, in which the shipbuilder brings together in one unit (the ship) a vast cross-section of the products of the nation. The fortune of hundreds of firms ranging from the suppliers of basic materials to subcontractors, operating throughout the country are intrinsically centered with the prosperity of the Shipbuilding industry. Thus the development of shipbuilding facilities would result in the development of related marine equipment and com-

12. The cost structure of Indian shipping is very competitive as compared with shipping of other maritime countries. But production costs of many Indian goods are higher than those of comparable goods produced by other countries and thus there is an element of uncertainty regarding export promotion. This risk is absent in the case of Indian shipping.

Secondly, the cost of assistance required from Government in regard to shipping for earning a given amount of foreign exchange is far less (less than 25%) than the cost of assistance required on selected exports of goods for earning the same amount of foreign exchange.

Thirdly, the ships start earning foreign exchange from the date of their delivery and the gestation period (the time lag between the ordering of ships and their delivery) is only 1½ to 2 years whereas it varies between 3 and 4 years in respect of the industrial units. Fourthly, industrial units once set up in a country cannot be dismantled and exported. Ships on the other hand can be sold at any time without much loss.

ponents industries which offer a large outlet for employment of technically trained personnel. From the point of view of developing these ancillary industries and in the present context of widespread unemployment in the country, it is necessary that shipbuilding which provides greater demand for material and men be given every possible assistance. Also the proportion of expenditure in foreign exchange as between that which is required to acquire ships from foreign countries in order to fulfil a certain tonnage target and the cost of building a shipyard is so staggering that any Government would almost over-night take a decision to expand indigenous shipbuilding capacity. Further, shipyards all over the world are crowded to capacity for at least three to four years to come. Their costs are rising day-by-day and there is an element of uncertainty in the ultimate price that would have to be paid. It is also economically and strategically disadvantageous to depend eternally upon foreign shipyards to meet national shipping requirements. Therefore India should increase her own shipbuilding capacity.

E. Shipbuilding in India

The shipbuilding industry in India is not a matter of chance or of casual growth. It is as old as civilisation. Indian civilisation spread to distant shores and enriched the people of the world through its maritime activities. The mighty rivers flowing from the mountains into the seas, the vast coast line, the forests rich in timber helped in building riverine boats as well as ocean going vessels from the dawn of civilisation itself.¹³ The rich natural resources which India is abounded in, made this a very flourishing industry. History indicates the existence of as many as twenty seven different types of ships of various sizes in the eleventh century. The shipbuilding industry had

13. Evidence of India's maritime activities is available in archeology, iconography, sculpture and literature. From the Rigveda to the peregrinations of Marcopolo and still latter, to the days of East India Company there is no dearth of evidence to establish the fact that for centuries India has been amongst the foremost maritime countries in the world.

Jog, N.G., *Saga of Scindia*, The Scindia Steam Navigation Co. Ltd., Bombay, 1969, p. 4.

for long established its reputation for highest standard in design, execution and workmanship.¹⁴

In 1801 the East India Company and the then Governor General, Lord Wellesley acknowledged the comparative superiority of Indian shipbuilding industry and even recommended the ships to be built in India for the British Navy and trade on the grounds of cheapness, strength and durability.¹⁵ However, the subsequent century of British rule saw 'systematic slaughter' of Indian shipping and shipbuilding industry through stringent legal enactments of the British Parliament due to hostility of British shipping so that the latter could thrive.¹⁶

Further with the scientific progress in Europe and with the replacement of timber by steel; and sail by steam, the growth of shipbuilding industry was arrested in India. Hence by the beginning of 20th century both the shipping and shipbuilding in India were on the rocks.

It was in 1919 that the Scindia Steam Navigation Company was established by Seth Narottam Moraree and Seth Walchand Hirachand who deserve the credit for the revival of the Indian shipping and shipbuilding industries. The company had to face a number of difficulties in developing the Indian merchant navy. Their attempts to start the shipbuilding activities in the 1920's failed and though the proposal for starting a shipbuilding yard was always before the company, practical steps could not be taken till 1940's.

Finally though the British Government in India declared their disinterest in the Indian shipbuilding industry, the site for the establishment of the industry was selected at Visakhapatnam in 1940's with the assistance of Sir Alexander Gibb

14. This is also supported by K. B. Vaidya in his book. *The Sailing Vessel Traffic on the West Coast of India and Its Future*—India could build sailing ships upto the highest admiralty standards—, The Popular Book Depot, Bombay, 1945, p. 25.

15. Lovji Wadia family of Bombay were the first Indian master builders who made the East India Company recognise the excellence and durability of the ships built in India. They built 355 ships for the company including warships which distinguished themselves in Britain's naval battles with Napoleon.

16. Harisinghaney, D., *Indian Shipping*, Vol. XXV, No. 8, August 1973, p. 22.

and Partners—a reputed British firm of engineers. Several economic and geographic factors have proved to be highly favourable to the development of the shipbuilding industry at Visakhapatnam. More than 300 acres of land was available in the area of the Visakhapatnam Port for the development of modern shipbuilding yard. The Dolphin's Nose provided protection to the harbour from the bay storms. The good sea frontage facilitated the launching of big ships. Well connected by railways, Visakhapatnam has been in a favourable position to obtain raw materials like steel from Jamshedpur, timber from Chotanagpur and other areas, etc. Local labour had been available for the development of the shipbuilding industry. In view of the fact that the hinter land of Visakhapatnam is rich in iron ore, manganese, limestone, and other materials, the construction of a steel plant for supplying to the needs of steel for the shipbuilding industry at Visakhapatnam is likely to be materialised.

The 21st June 1941 was an important day in the annals of Indian shipbuilding, as with the laying of the foundation stone, at Visakhapatnam for modern shipyard by Dr. Rajendra Prasad, the then President of Indian National Congress and subsequently first President of the Indian Republic, the hoary traditions of this strategic industry were reinvigorated. Gurudev Rabindranath Tagore described it as “building one of the main pillars of India's prosperity and independence.”¹⁷ The history of Indian shipbuilding since then and upto August 1947 was a saga of heroic struggle and sacrifice made by the Scindias against many odds. The task then was similar to recovering inch-by-inch the lost land from alien forces during a war. As in a battle, the achievement is to be judged not by the extent of territory regained, but by the victory of the cause fought for and which paved the path for rapid progress after independence.

Since the Shipyard was constructed during the peak of the war, the work was delayed due to a number of unprecedented difficulties. The Government ordered for the closing down of the yard construction work because of the Japanese air-raids on

17. Jog, N.G., op. cit., p. 131.

Visakhapatnam Port. Added to this, essential materials like steel, timber, cement, etc., were scarcely available. In the meanwhile the Scindia Company was permitted to start a small yard in Bombay where engines, propellers, etc., were made. With the end of the war, the company was allowed to resume its activities at Visakhapatnam on a small scale as the Government desired to maintain the port.

Work progressed very slowly and it took three years before the actual ship construction work was undertaken. It was only by 1946 that the company was in a position to start construction of the ocean going ship of 8,000 DWT. This modern steam ship 'Jala Usha' was launched on the 14th March 1948 by the then Prime Minister Pandit Jawaharlal Nehru and he assured "shipbuilding industry will not suffer and will go on at all cost and every cost."¹⁸ Also he said that the Government is keenly interested in the Indian shipbuilding industry. The second ship SS 'Jalaprabha' was launched on the 28th November 1948.

After building 8 ships totalling 36,105 GRT with an investment of Rs. 4 crores the Scindia Steam Navigation Company found it difficult either to continue the construction of ships or to complete the project as planned, without state assistance. The price of steel rose very steeply and was mainly responsible for the large difference between the cost of construction of a ship in India and that in United Kingdom. So the owners felt that they could not retain the shipyard under their control any longer. As a result of representations made by them and having regard to its strategic and national importance the Government of India decided to acquire a major share in the Shipyard. Accordingly the Government floated a new company "Hindustan Shipyard Limited" on the 21st January 1952 and issued shares to the value of Rs. 313.75 of which two-thirds of the shares were held by the Government of India and the remaining one-third shares were held by Scindia Steam Navigation Company Ltd. The new company took over the management of the shipyard on the 1st March 1952. In July 1961, the shares held by the Scindias were also acquired by the Government.

18. Ibid, p. 159.

F. Towards Modernisation and Expansion

Since the Hindustan Shipyard came under complete ownership of the Government, it is managed by the Government of India under the Ministry of Transport and Shipping. The layout of the Yard was originally designed in the early forties by a British firm of consultants. Soon after taking over the yard, the Government took various measures to improve. The first of it was to enter into an agreement in July 1952 with Societe Anonymedes Ateliers Et Chantiers De La Loire, Paris (ACL) for technical collaboration. This agreement with ACL lasted for a period of six years till July 1958. During this period the French firm virtually functioned as technical managers of the shipyard through a team of technicians deputed by them. The French firm recommended a scheme of constructing only the four bigger berths and dropping the remaining smaller ones in view of the scope for increasing adoption of prefabrication methods. The scheme submitted by them contemplated raising the production capacity of the yard to a maximum of six to eight ships. But consequent on the fall in freight rates and the price of second-hand ships becoming attractive, the special committee of directors appointed by the Board recommended only the adoption of a part of the scheme drawn up by the French firm so as to achieve a production of four ships of 8,000 DWT, i.e., 32,000 DWT per year. The salient features of this development programme were as follows :

- Construction of two new berths,

- Provision of a prefabrication shop together with two auxiliary bays,

- New building for housing the drawing office and stores departments,

- Provision of a plumbing and foundry shop and extension of blacksmith shop,

- Extension of the outfit jetty,

- Renewal and augmentation of some machines in the various shops including a few overhead travelling cranes,

- Provision of two heavy lift travelling cranes on the berths as well as a 5/10 ton travelling crane on the jetty,

- Provision of additional housing and other social amenities.

Subsequent to the expiry of the French agreement, a short-term arrangement for technical advice on the construction of vessels of a type originally designed by Messrs. Lubecker Flenderwerke, West Germany, was made. According to this arrangement, the German firm deputed one of their technicians to assist in the construction of ships built to their design. This lasted from May 1958 to May 1960. Since then there has been no foreign collaboration and the Shipyard is manned entirely by Indian personnel.

The shipyard which was originally laid out in an area of 56 acres has now extended to a total of 72 acres. At present it has four large building berths :

Berth No. I	558' × 80'
Berth No. II	550' × 80'
Berth No. III	500' × 80'
Berth No. IV	500' × 80'

The demensions of the berths, the water front and the cranage and marshalling arrangements around the berths restrict the maximum size of a ship that could be built in the yard to about 25,000 DWT in the case of bulk carriers and tankers, and 15,000 DWT in the case of general cargo vessels.

G. Production Pattern and Development Programmes

Hindustan Shipyard is historically associated with the construction of general cargo vessels. But the demand for these vessels is not growing very strongly as we observe from Table 2.1. The world order book for these ships was slightly higher (7.88 million gross tons) by the end of 1975 than it was in early 1968 (6.33 million gross tons). The peak in the market was reached at the end of the last quarter of 1970 at 10.01 million gross tons. It has been declining continuously since then and only recently (since 1974) demand for general cargo vessels has strengthened. There are in total 35 countries involved in the production of the ships making them the most widely produced type of ship in the world. Japan and West Germany are the main world producers of this vessel. Japan has been reducing its production of this type of ship recently. However, from the point of view of the need for replacing existing over-aged vessels in general cargo and the requirements of India in this

respect, it has been suggested that the Hindustan Shipyard continue the construction of this type of vessel. Further, as rightly pointed out by the British Consultants' Team (1973), it is in the less specialised areas of building that countries like India maintain some comparative advantages.

The Hindustan Shipyard has recently entered bulk carrier sector by producing pioneer type vessels. During the last three years (1972-74) the share of this type of vessel in world's fleet has slightly gone up from 23.7% to 25.5%. The world order book for bulk carriers is currently doubled to what it was in early 1968 (18.18 million gross tons by the end of first quarter of 1975 compared with 9.58 million gross tons). The market reached its peak in the last quarter of 1970 at 26.26 million gross tons but has declined steadily ever since (Table 2.1). It is only during the first quarter 1975, the demand for bulk carriers has recorded signs of a rising trend. An attractive feature of the bulk carrier is that it would be largely unaffected by the reopening of the Suez Canal because only a very small proportion of the bulk carrier fleet operate on routes that could take advantage of the Suez Canal.¹⁹ The Euro-Economics Research Organisation predicted that by 1980 demand for gross additions to the fleet of bulk carriers would be 12.70 million DWT. Further the market is showing a very strong tendency towards larger ships. On account of all these factors, undoubtedly, it is in this area that the Indian shipping industry wants to expand as witnessed by the figures of ships on order by India. Accordingly the Hindustan Shipyard is in the right direction in entering bulk carrier sector. However, as opined by the British Consultants it may take anything upto an output of 10 ships to reach maximum efficiency (or minimum dependence on subsidy) for the Hindustan Shipyard in this line.

The number of ships launched and delivered so far by the Hindustan Shipyard is shown in Table 2.7. As on the 31st March 1974, a total number of 63 ships (including small craft) aggregating to over 5,37,671 DWT have been built and delivered by the yard. These cover a wide range—from ocean-going cargo liners to all types of specialised craft—of ships and include a sophisticated Naval Survey vessel, a modern training ship, two

19. Report of the British Consultants Team, Vol. III, pp. 2-4.

TABLE 2.7
SHIPS LAUNCHED AND DELIVERED BY THE HINDUSTAN SHIPYARD

Year	Launched		Delivered	
	Number of ships	DWT	Number of ships	DWT
1948	2+PF	16,358+PF	1	8,179
1949	2	16,288	2+PF	16,317+PF
1950	2	16,278	1	8,150
1951	2	16,259	3	24,412
1952	2	16,212	3	24,337
1953	2	16,214	Nil	Nil
1954	1+ML	7,248+ML	2	16,214
1955	2+KNT	14,633+KNT	2	14,559
1956	1+PCCV	10,723	2	15,575
1957	3	22,792	1+KNT+PCCV	10,638+KNT
1958	2+MV	12,810+MV	2+ML	14,624+ML
1959	2+SV	15,037+SV	2+MV	12,810+MV
1960	2+PSV	19,310+PSV	1	5,405
1961	3	37,748	3+PSV	28,942+PSV
1962	2	25,185	3	37,791

1963	2	25,786	2	25,142
1964	2	25,862	1+SV	12,913+SV
1965	2	25,835	1	12,873
1966	2	25,772	4	51,697
1967	2	25,931	2	25,772
1968	2	25,868	2	25,931
1969	2	25,752	3	38,768
1970	3+L	38,645+L	2+L	25,733+L
1971	1+LC+TS	13,967+LC+TS	2+LC	25,764
1972	2+D	27,957	TS	TS
1973	2	27,527	3+D	41,924+D
1974			2	27,527

ML=Motor Launch; L=Launch; TS=Training Ship; D=Dredger; SV=Survey Vessel; PCCV=Passenger-cum-Cargo Vessel; KNT=Kort Nozzle Tug; PF=Passenger Ferry; MV=Mooring Vessel; LC=Landing Craft; PSV=Port Survey Vessel.

Source: 22nd Annual Report of the Hindustan Shipyard Limited, 1973-74.

passenger ships and a good number of miscellaneous craft.²⁰ So far the Hindustan Shipyard has contributed 10% of total Indian tonnage; but if only the liner and dry cargo tonnage is taken into consideration, tonnage built in the Shipyard amounts to 22%. The saving in foreign exchange on account of the ships, so far built by the yard is reckoned at over Rs. 30 crores.

Although basically the pattern of layout and development suggested by the French firm has been fairly satisfactory, the fact remains that the techniques and methods of construction employed in the fifties have become somewhat obsolete today, more so with the great boom in shipbuilding resulting in the introduction of specialised ships and vessels of larger tonnage. For example, the adoption of prefabrication techniques upto single unit of 50 tons each, which was considered an innovation, almost revolutionary in concept in the fifties, has become so obsolete today that prefabrication of units less than 200 tons is equated with conventional prewar shipbuilding method of erecting piece-by-piece on berths. Similarly the conventional loft involving scribing and preparation of templates has yielded place to optical marking and electronic tracer cutting methods.²¹

Therefore, in order to keep abreast of latest techniques and methods in modernising shipbuilding, teams of senior technical officers with wide experience are being deputed as a regular feature to modern foreign yards in U.K., Germany, Norway, Sweeden and other countries in Europe as well as Japan, for the purpose of studying the various aspects of the modernisation programmes which many of these yards have implemented in recent times. Further to set right the imbalance in the existing equipment and physical facilities and to replace the outmoded machinery, Hindustan Shipyard has embarked upon an ambi-

20. In terms of number and type, the yard has built the following vessels by the end of March, 1974: Fifty-one, ocean-going cargo-liners; One Naval Survey vessel (I.N.S. Darshak); One Mooring vessel for the Navy (I.N.S. Dhruvak); One Training ship (T. S. Rajendra); One Passenger-cum-Cargo ship; One Passenger ship; One Port Survey vessel; One Port Tug; Three Motor Launches; One Landing Craft (22nd Annual Report, 1973-74, Hindustan Shipyard). pp. 57-58.

21. Brochure on the Hindustan Shipyard Limited, 1972, p. 12.

tious plan of modernisation and expansion. The first phase of this integrated development programme which was estimated to cost ultimately Rs. 11 crores, is now under execution. Main features of this development programme are installation of heavy-lift travelling cranes (two 45-ton cranes; one 60-ton crane on the berths, and one 50-ton crane on the fitting out wharf), provision of sophisticated and versatile machinery and equipment, modernisation of the layout and working methods and provision of a big wet basin capable of berthing two-medium-size ships at a time. On completion of this phase by the end of 1975, the shipbuilding capacity of the yard will raise from 38,000 DWT to 80,000 DWT per annum.

A computer has also been installed in November 1970, to meet the ever-increasing data processing requirements arising out of the constantly-growing business of the Shipyard. Apart from a modest beginning in creating a 'data bank,' applications relating to purchasing, stores and inventory control, financial accounting, wages, salaries and related personnel statistics, production reporting, and certain design calculations have already been taken on the computer.

Under the second phase of the development programme, in addition to the traditional slipways, the Shipyard has plans to equip itself with two building docks, to facilitate construction of specialised container vessels in the range of 18,000 – 30,000 DWT and sophisticated bulk carriers and tankers upto 60,000 DWT. The Outer Harbour Project, currently under execution by the Visakhapatnam Port Trust, designed for receiving giant ore-carriers, is scheduled for completion by 1975. Apart from providing the much needed repair facilities to these giant vessels calling at the Outer Harbour, the Hindustan Shipyard has plans to embark upon the construction of mammoth vessels for the first time in India. The possibility of undertaking construction of mammoth vessels in the range of 1,00,000 – 2,60 000 DWT, by such techniques as building the hull in two parts in one of the building docks and thereafter assembling the same alongside a deep wharf berth adopting under-water welding methods are being explored. For this purpose, the Shipyard has initiated proposals for locating suitable wharfage within the Visakhapatnam Outer Harbour.

The country's total requirement of Naval Craft and Dredgers of all types are beyond the capacity of the Indian yards currently engaged in the building of these vessels. Hindustan Shipyard, which had already to its credit such construction, has plans to enter these fields on a large-scale. Schemes are afoot to acquire land with waterfront, immediately adjacent to the shipyard, for this purpose.

H. Shipbuilding Capacity - Steps to be taken for expansion

In addition to the Hindustan Shipyard Limited, Visakhapatnam - the premier shipbuilding unit in the country—shipbuilding facilities are also provided by Mazagon Dock Limited, Bombay and Garden Reach Workshops Limited, Calcutta—the two units which were concentrating on ship repairs till recently are now equipped with facilities for ship construction. Although the Mazagon Dock at Bombay is specialising in the construction of Naval ships, it is capable of building general cargo ships and passenger-cum-cargo ships upto 15,000 DWT. The Garden Reach Workshops of Calcutta is mainly engaged in the construction of harbour craft, but the development plans envisage expansion of its shipbuilding capacity for undertaking construction of cargo ships of 15,000/25,000 DWT. The shipyard at Cochin which is under construction will be capable of building bulk carriers in the range of 65,000 to 85,000 DWT. After implementing the current development plans and Cochin shipyard reaching optimum production, the indigenous production of ships will be around 0.2 million GRT per annum. This rate of production of ships is extremely paltry in comparison with India's annual requirement which (in the light of the target fixed for the fifth year plan, viz., 8.6 million GRT) is one million GRT. Further as already mentioned above, the tremendous increase of cargo movements across the oceans during the last few years, the physical characteristics and huge volume of the almost infinite range of cargoes and the operational economics and transport costs have resulted in the development of a variety of specialised ships. And it is apparent that unless and until India increases shipbuilding activities, the planning for acquisition of ships cannot be fulfilled because of recurrent foreign-exchange shortages and fluctuations in the

need for orders of foreign shipbuilding countries. Hence it is imperative to strengthen and expand the indigenous shipbuilding industry by giving the highest priority in the matter of 'full order book'²² and expeditious clearance of imports for essential raw materials and components. It may be mentioned here, all over the world, shipping and shipbuilding industries are aided in a very special way by various methods including monetary incentives because of the special importance they occupy both in the national economy as well as in the national defence. Even the highly developed and advanced maritime nations such as U.K., Japan, West Germany, Norway, Sweden, Denmark and U.S.A. have been in the forefront in recognising this fact.²³

The Government of India has included the shipbuilding industry in the core sector and pronounced through the Industrial Policy Resolution of 1956 that the future development of the industry will be exclusive responsibility of the state. The Government has been investing funds by way of equity and loans as well and also allowing construction subsidy and certain tax benefits to the shipbuilding industry. However, a number of steps will have to be taken by the Government to

22. 'Full Order Book' refers to adequate number of orders received by any shipyard taking into consideration its capacity, the time taken to build the ship, etc. For instance, taking into account the existing facilities full order book in the case of the Hindustan Shipyard consists of 20 ships.

23. In addition to giving subsidies in many countries, special treatment in one respect or the other is given. It is believed that Japanese steel industry has helped the growth of the country's shipbuilding industry by supplying high grade low cost steel on a relatively stable price basis, particularly for export. In addition, Japanese Government prohibits ship-owners to build ships outside Japan. It is further understood that ships built for domestic requirement are priced about 13% more than that of similar ship for export. (S. Balakrishna Shetty, *Economic Times*, 30th January 1973, p. 5).

The principal reasons for direct Government assistance as described in the OECD report are: (i) the necessity to compensate shipbuilders for higher local costs outside their control; (ii) to put the domestic industry on an equal footing with foreign competition; (iii) the necessity to ensure predetermined level of activity for imperative social or strategic conditions; (iv) the necessity to facilitate the adjustment of an industry to changed market conditions; and (v) the necessity to assist an emerging industry during its early stage of development.

speed up the growth of shipbuilding industry in India.

Nearly 65 to 70% of the cost of construction of a ship represents 'bought out' materials and components. Obviously the efficiency of the industry, therefore, very much depends upon the quality and timely supply of the required material for smooth production down the line. The infrastructure of marine industry essential for successful shipbuilding was simultaneously developed in the advanced countries as a result of which steel and other equipments are readily available to the shipbuilder. But in the developing countries like India parallel growth of ancillary is still in a nascent stage. Growth of ancillary industries will give a fillip to the shipbuilding industry. In addition to this, certain other conditions will have to be fulfilled to promote shipbuilding activity. They are (i) sound layout, sophisticated plant and machinery and good material handling facilities. This calls for building docks, extensive use of computers, electronic cutting machines, etc., (ii) large-scale introduction of block-construction methods, (iii) standardisation of construction elements as well as ships of a particular type and size. This would also need the back-up from the national shipowners and above all, (iv) the attitude of workforce to take up the challenge with a high order of discipline. A coordinated approach is essential for achieving simultaneous progress in the fields of shipping, shipbuilding, port developments, ship repairing, manufacture of marine-equipment and other interrelated activities. In fact, this requires an integrated crash-programme to be implemented during the Fifth Five-year Plan so that positive results are obtained from the middle of the Sixth Five-year Plan. It has been suggested that a Central Body–National Shipbuilding Commission—consisting of representatives of shipyards, shipowners, Government departments concerned (i.e., Ministries of Shipping & Transport, Defence and Industrial Development) and various other interests in the marine field, needs to be constituted in order to develop our shipbuilding industry in a rational manner keeping in mind the resources available. The Commission would strive for rapid indigenisation, coordination, variety reduction, standardisation of ships' equipment, bulking of orders to ensure economic quantity and provide the research and design effort.

needed to make Indian Shipping and equipment competitive in the world market.

The Government has in mind to increase the shipbuilding capacity by taking up the construction of two new yards at Haldia (West Bengal) and Paradip (Orissa) during the next five years besides the one under construction at Cochin. However, the new shipyards that are now being proposed can take shape, commence production and reach the optimum level of production only after a period of 8 to 10 years. On the other hand, expansion of the existing yards will not only be economical but can also be rapidly achieved. Hence, the Hindustan Shipyard Limited, Visakhapatnam—the premier and the biggest shipbuilding unit in the country, has to play a crucial role in fulfilling our aspirations and expectations in this regard.

It is not out of context to mention here the role of Japan in world shipbuilding industry. Today Japan continues to flood the world²⁴ with the export of low priced and high quality ships earning itself the admiration of competitors. Table 2.8 shows the role of Japan in world shipbuilding industry. Out of the total 2,884 ships launched in 1973 Japan accounted for 1,125 ships. The table further shows the position and progress made by the major shipbuilding countries and the insignificant role of India from 1957 to 1973. It may be noted here that it is only in 1948 Japan successfully won an export-ship order for the first time after the world war which left the shipbuilding industry in shambles and by 1956 Japan launched a total of 17,46,000 GRT out-distancing Britain and West Germany and became number one shipbuilding nation in the world. Since then Japan never looked back and continued to hold this position with every succeeding year.

In addition to the missionary zeal and unseizing efforts of Japanese shipbuilders, there are several factors that contributed towards this breath-taking achievement. Salient among these are: global expansion of demand for new ships; modernisation of production facilities and technology; advancement of the iron, steel and other allied Industries and a reservoir of excellent shipbuilding technicians and skilled workers. Further

24. In 1973 Japan accounted for nearly 50% of the total world production.

TABLE 2.8
SHIPS LAUNCHED BY THE COUNTRY OF BUILD FROM 1957 TO 1973

Year	Japan		United States of America		Spain		Narway		Netherlands	
	Num-ber	Tons Gross	Num-ber	Tons Gross	Num-ber	Tons Gross	Num-ber	Tons Gross	Num-ber	Tons Gross
1957	433	2,432,506	54	359,006	66	108,720	83	239,447	199	476,309
1958	416	2,066,669	64	732,381	77	145,221	76	259,020	161	555,697
1959	514	1,722,577	47	596,757	77	112,420	67	307,467	145	607,497
1960	649	1,731,656	60	484,978	78	161,289	80	197,933	188	566,933
1961	643	1,799,342	56	342,766	89	151,406	84	362,962	165	570,837
1962	558	2,183,147	90	449,050	92	125,254	95	376,444	151	418,494
1963	707	2,367,353	78	294,427	131	174,796	91	340,930	148	377,026
1964	715	4,085,190	80	275,502	152	217,032	121	408,735	140	225,767
1965	710	5,363,232	130	269,921	174	294,626	109	408,558	127	232,780
1966	767	6,685,461	191	167,321	169	398,056	126	537,401	107	284,271
1967	926	7,496,876	231	242,004	166	405,965	134	522,069	131	338,818
1968	1,115	8,582,970	199	441,125	216	506,387	122	495,221	115	303,309
1969	1,072	9,303,453	174	399,884	162	559,694	114	711,938	96	595,661
1970	1,013	10,475,804	150	338,077	156	925,697	111	638,770	109	460,503
1971	996	11,992,495	242	482,329	144	915,985	114	830,623	109	821,106
1972	868	12,865,851	251	611,224	161	1,141,592	113	974,803	116	760,803
1973	1,125	15,673,115	280	889,606	213	1,568,285	136	1,071,335	120	896,459

Shipbuilding Industry

Year	Great Britain			Poland			India*			Other Countries			World		
	Num- ber	Tons Gross	Num- ber	Tons Gross	Num- ber	Tons Gross	Num- ber	Tons Gross	Num- ber	Tons Gross	Num- ber	Tons Gross	Num- ber	Tons Gross	
1957	260	1,413,701	64	140,226	7	15,785	784	3,315,704	1,950	8,501,404					
1958	282	1,401,980	62	162,283	5	10,100	793	3,936,632	1,936	9,269,983					
1959	274	1,372,595	59	183,665	4	13,200	621	3,829,526	1,808	8,745,704					
1960	253	1,331,491	70	227,221	4	13,401	638	3,641,482	2,020	8,356,444					
1961	247	1,191,758	59	214,912	6	28,737	641	3,277,285	1,990	7,940,005					
1962	187	1,072,513	44	189,412	5	22,216	679	3,538,224	1,901	8,374,754					
1963	160	927,649	42	185,448	6	23,041	638	3,847,843	2,001	8,538,513					
1964	179	1,042,576	53	261,559	4	20,061	703	3,727,381	2,147	10,263,803					
1965	158	1,073,074	53	334,395	10	20,553	809	4,218,678	2,280	12,215,817					
1966	166	1,084,299	55	387,340	14	21,190	966	4,741,863	2,561	14,307,202					
1967	149	1,297,678	70	400,445	16	24,388	955	5,051,868	2,778	15,780,111					
1968	134	898,159	61	424,477	4	19,240	832	5,236,855	2,798	16,907,743					
1969	136	1,039,516	53	364,226	9	23,856	1,003	6,317,062	2,819	19,315,290					
1970	130	1,237,134	52	463,442	6	28,716	973	7,121,370	2,700	21,689,513					
1971	126	1,236,692	57	489,023	6	14,384	851	8,075,064	2,645	24,859,701					
1972	125	1,233,412	87	574,965	7	31,517	813	8,520,219	2,561	26,714,386					
1973	125	1,017,665	90	550,179	4	25,350	791	9,828,379	2,884	31,520,373					

*Information supplied by Lloyd's Register of Shipping, London.

This Table excludes the People's Republic of China, Rumania and U. S. S. R.

Source: Compiled from Lloyd's Register of Shipping, Statistical Tables, 1974, pp. 68-69.

another important reason for Japan's lead in world shipbuilding is that Japanese Industry is relatively strike free. When there is a strike in Japan, it usually begins on a Saturday afternoon and ends on Monday morning. The basis of labour relations is mutual trust. Construction and repair time have been constantly reduced over the years in Japan. In building a tanker it now spends 19 hours per gross ton compared with 46 hours earlier. It will be interesting and worthwhile to examine the extent to which the Hindustan Shipyard satisfies the conditions prevalent in Japan. This study attempts to evaluate the contribution made by personnel working in the Hindustan Shipyard and explores the possibility of stepping up this contribution.

I. Pricing and Subsidy

The ocean-going cargo vessels built in this yard are sold to the owners at a predetermined international parity price. In relation to the international parity price, cost of construction is always higher and to fill the gap. Government assistance in the form of subsidy is given to the yard. This is not an unusual feature if one takes note of the fact that Shipbuilding Industry is subsidised from a minimum of 10% to a maximum of 55% in all leading shipbuilding countries by the respective Governments, and consequently the 'international price' is not the same as 'International cost.' (For example, U.S.A. pays upto 55%, Canada 35%, Australia 33% and the minimum in the Organisation of Economic Cooperation and Development countries is 10%). But with effect from the 1st April 1971, a new pricing formula, has come into existence under which, while Government of India's assistance is limited to 5% the owners are also required to pay 5% extra over the international price. Government assistance will taper off by reduction at the rate of 1% every two years. For the above formula to work successfully there are two possible alternatives before the Hindustan Shipyard: to increase the price of the ship beyond the international parity price (at least charging the cost at which the ship is manufactured) or to build the ship cheaper and faster. The first alternative is not possible as already there is stiff competition in the international shipbuilding trade. Hence the only alternative available to the Hindustan Shipyard is by building

ships much cheaper than hitherto done. Therefore the most important problem which needs to be tackled urgently is to improve productivity and it is only the increased productivity which enables the shipyard to build ships at faster rate and at cheaper price. However, no worthwhile endeavour in this direction is possible unless there is complete unity of thought and action between management and labour.²⁵ Hence, a mighty co-operative effort alone can produce great results. Therefore management must see that the workforce is properly motivated. Improvement of productivity starts from the field of industrial relations. It is in this context the present study is expected to make an useful contribution.

25. It is true the Shipyard is faced with many constraints like erratic flow of materials, outmoded machinery and equipment, lack of standard working methods and lack of planning and co-ordination. But the success of any step that might be taken to overcome these constraints depends to a large extent on the attitude and co-operation of employees and their organisations.

CHAPTER III

EMPLOYMENT STRUCTURE AND TRENDS

A Workforce – Characteristics and Trends

Not every man has the same mental or physical proficiency, nor is each man readily compatible with every other man. One therefore seeks to establish an organisation containing both proficient and compatible people. Devices have to be developed and used which will provide reasonable assurance that the organisation will be staffed with competent personnel. Just as man's efforts do not meet with success unless organisation exists to facilitate its attainment, the utility of organisation is lost unless the men operating within it are competent in terms of the specific requisites of that organisation.¹ Success of organisation develops through carefully planned policy of recruitment, transfers, promotions and separations.

Hindustan Shipyard is a giant organisation employing a workforce of about 5,372 (as on the 31st December 1971) comprising of employees with different skills, belonging to different categories, with various backgrounds. The number by itself could bring in innumerable problems to the management and the union leaders alike. Of the listed workers, about 92% were married and had seven or more dependents on an average. 69.76% of the selected workers were natives² of Visakhapatnam.

1. Theodore A. Toedt, et al, op. cit., p. 229.

2. For the purpose of this study all those residing within the Visakhapatnam Municipal limits are considered as natives.

Out of the remaining 30.24% though classified as immigrants, majority had actually migrated from nearby places of Visakhapatnam where their fathers or relatives continued cultivation. Some of them had migrated from Burma during the Second World War. In respect of staff, 63.49% were natives of Visakhapatnam.

In order to have an idea about the strength and distribution of workers in various departments, a study of the average roll of workers per day in different departments from 1957 to 1971 is made the number of workers increased from 3,768 in 1957 to 3,861 in 1971. The peak year of employment as can be seen from the table was 1963 (4,224). The increase in total employment however cannot solely be attributed to the increasing strength of individual departments, but is also due to the increase in the number of departments. Blacksmith, Galvanising, Inspection, Antimalaria, Graving dock and Drydock departments were added to the existing departments depending upon the requirements from time to time. It is also observed that after 1963 the total number of workers on the roll had been declining even though the number of departments were on the increase. This could largely be attributed to the decreasing strength of many departments. The years 1961, 1962, 1963, 1964 and 1965 witnessed the maximum number of workers on roll in different departments and afterwards the number is seen to be decreasing. There is no doubt that automation, mechanisation and advance techniques have made this possible.

A break-down of employees—workers, staff and officers — showing their average daily employment during the period 1957–71 is given in Table 3.1.

The table helps us to have an insight into the types of workers who were on the increase or decrease and the employment position of technical and non-technical staff and officers. It is seen from the table that in most of the years skilled workers were on the increase. Their number had gone up from 1,312 in 1957 to 2,465 in 1971. Simultaneously it is seen that semiskilled and unskilled workers were on the decrease, i.e., the semiskilled decreased from 1,151 in 1957 to 480 in 1969, but however increased to 624 in the year 1971. In the case of unskilled workers, their number has declined from 1,305 to 772 during

TABLE 3.1
AVERAGE DAILY EMPLOYMENT OF WORKERS, STAFF AND OFFICERS - 1957 TO 1971

Year	Workers				Staff			Officers			Total Employment (Workers, Staff and Officers)
	S	SS	US	T	Technical	Non-Technical	T	Technical	Non-Technical	T	
1957	1312	1151	1305	3768	342	381	723	88	19	107	4598
1958	1361	1254	1190	3805	394	418	812	87	21	108	4725
1959	1537	1125	1159	3821	407	428	835	80	23	103	4759
1960	1709	985	1209	3903	424	429	853	79	26	105	4861
1961	1866	987	1274	4127	432	447	879	76	26	102	5108
1962	1934	949	1241	4124	438	472	910	85	29	114	5148
1963	2074	946	1204	4224	463	514	977	90	29	119	5320
1964	2294	840	1065	4199	490	617	1107	90	33	123	5429
1965	NA	NA	NA	NA	491	669	1160	99	37	136	NA
1966	2470	635	1066	4171	502	712	1214	104	36	140	5525
1967	2515	638	996	4149	488	701	1189	117	35	152	5490
1968	2517	601	932	4050	504	701	1205	121	40	161	5416
1969	2543	480	883	3906	519	704	1223	131	42	173	5302
1970	2510	543	797	3850	521	715	1236	140	52	192	5078
1971	2465	624	772	3861	553	732	1285	171	55	226	5372

S = Skilled; SS = Semiskilled; US = Unskilled; T = Total; NA = Not available.

the period under study. But the number of staff as well as officers were on the increase, while staff increased from 723 to 1,285, officers both technical and non-technical increased from 107 to 226, i.e., by more than 100%. However, it is seen in spite of considerable increase in skilled workers, staff and officers there has been no increase in production as revealed by the Table 2.7. The increase in staff and officers however, could not find any explanation from higher authorities which makes it clear that the staffing is not guided by any set of job and position but is mostly done on the basis of 'a felt need,' which is not a scientific and efficient method of recruitment. During the above period while the skilled workers increased by 88%, the semi-skilled and unskilled workers decreased by more than 40% during the period of 15 years. The staff increased by 78% and officers by 111%.

The growth relationship between various categories of employees, staff and workers is shown in Table 3.2. It is seen from the table, the number of non-technical officers per 100 technical officers varied from 22 to 32 during the period of study 1957-71. The lowest ratio was in 1957 (22) and the highest was (37) in 1964, 1965 and 1970. In the case of number of non-technical staff per 100 technical staff, it varied from 101 in 1960 to 144 in 1967. It is further seen that the number of technical officers per 100 technical staff varied from 18 to 31 during the period under study. Regarding the number of officers—both technical and non-technical per 100 staff both technical and non-technical—the variation was from 11 to 18 during the period of 15 years. Number of technical officers and technical staff to 100 skilled workers was on the increase, it increased from 11 to 19 during the period 1957 to 1971. Further the number of officers and staff—technical and non-technical—per 100 workers increased from 22 in 1957 to 39 in 1971.

The sample depicts that the Hindustan Shipyard has young, energetic and dynamic workforce and this could be observed from Table 3.3 showing age-groupwise distribution of workers. The predominant age group among all categories of workers in the Shipyard is 31-35 years. Nearly 23% of workers belong to this age group. In respect of staff, the predominant age group varied among the three groups—G1 31-35; G2 41-45 and

TABLE 3.2
STAFF AND WORKERS RATIOS 1957 TO 1971

	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
No. of non-technical officers to 100 technical officers	22	24	29	33	34	34	32	37	37	35	30	33	32	37	32
No. of non-technical staff to 100 technical staff	111	106	105	101	103	108	111	126	136	142	144	139	136	137	132
No. of technical officers to 100 technical staff	26	22	20	19	18	19	19	18	20	21	24	24	25	27	31
No. of officers (both technical and non-technical) to 100 staff (both technical and non-technical)	15	13	12	12	12	13	12	11	12	12	13	13	14	16	18
No. of technical officers to 100 workers	2	2	2	2	2	2	2	2	2	2	3	3	3	4	4
No. of technical officers + technical staff to 100 workers	11	13	13	13	12	13	13	14	—	15	15	15	17	17	19

	<i>Employment Trends</i>														
No. of non-technical officers + non-technical staff to 100 workers	11	12	12	12	11	12	13	15	—	18	18	19	20	20	
No. of technical + non-technical officers to 100 workers	3	3	3	3	2	3	3	3	—	3	4	4	5	6	
No. of officers + staff (technical and non-technical) to 100 workers	22	24	25	25	24	25	26	29	—	32	32	34	36	37	39
No. of technical officers to 100 skilled workers	7	6	5	5	4	4	4	4	—	4	5	5	6	7	
No. of technical officers + technical staff to 100 skilled workers	33	35	32	29	27	27	27	25	—	25	24	26	26	29	

TABLE 3.3
PERCENTAGE COMPOSITION OF EMPLOYEES ACCORDING TO THEIR AGE GROUPS

[illegible]

G3 36-40. It is observed that 72.68% could read and write. Illiteracy as is seen from the data collected is greater among the unskilled workers and the older age groups. However, from the data collected it is evident that in the Shipyard in recent years people with some education are taking up the job of skilled and semiskilled trades. This promises good prospects. With young energetic and educated workforce, it is upto the management to motivate and maximise their contribution.

B. Recruitment

Recruitment is "the first step in the development of a firm's personnel activity as it is also one of the most critical steps in the establishment and the growth of a business."³ Hence the recruitment policy adopted by the management has a major effect on the ultimate success or failure of the organisation. Employment of the incompetent, unstable and unproductive people turns out to be a very costly process for any organisation. Therefore from the point of view of the efficient working of the organisation, management must do much more than merely filling up a vacancy.

Since the maintenance of individual and organisational stability is a major aim of the management, a balance should be kept between the number of people recruited and management's current expectations of hiring needs in the near future.⁴ One of the main responsibilities of the personnel department is to anticipate the company's manpower requirements far in advance and to ensure that an adequate number of qualified people are available to fill the right job at the right time. Personnel manager ought to know at all times how much and what kind of ability is required. Only on the basis of such knowledge recruitment needs can be accurately estimated. He has to take into account the rate of the company expansion or contraction, organisational structure and the rate of labour turnover. The objective should be to place people not only where they will be needed but also where they will be glad. Sophisticated per-

3. George Strauss C., Leonard R. Sayles, *Personnel*, Prentice Hall of India Pvt. Ltd., New Delhi, 1968, p. 451.

4. Paul Pigors, Charles A. Myers, *Personnel Administration*, McGraw-Hill Kogakusha Ltd., Tokyo, 1973, p. 268.

sonnel planning attempts to build motivation into tomorrow's assignment or at least attempts to avoid unnecessary boredom and frustration.

(i) Recruitment Procedure in the Hindustan Shipyard

In the Hindustan Shipyard, proposal for creation of any additional post, whether temporary or permanent, is initiated by the concerned department giving full justification for the additional post and the period for which it is required. This proposal is routed through Personnel Department in the case of officers and monthly-rated staff, and in the case of daily-rated workers through the Labour Department. The Personnel Department/Labour Department as the case may be, in turn examines the proposal and puts up the same to the Managing Director with its comments/recommendations.

Proposals for additional posts from the departments coming under the control of Director of Ship Construction are invariably routed through him.

The Managing Director is competent to approve posts upto Rs. 500/- to be ratified by the Board later. Posts carrying pay scales which project beyond Rs. 500/- are put up to the Board for prior approval. After obtaining proper sanction of the competent authority, recruitment in the case of officers and monthly-rated staff is initiated by the Personnel Department and in the case of daily-rated workers by the Labour Department.

In cases of extension of temporary placements, the concerned department furnishes to the Personnel Department/Labour Department proposals for such extensions, one month before the expiry of the temporary sanction with full justification.

In cases of resultant vacancies caused by promotion, transfer, resignation, discharge, death, etc., action to fill up the vacancy is initiated by the Personnel Department/Labour Department only on specific request from the department concerned in writing to fill up the vacancy.

(ii) Direct Recruitment—Officers and Staff Posts

Whenever direct recruitment is made the vacancy is first

notified to the local Employment Exchange/Central Employment Exchange as the case may be in the prescribed proforma in accordance with the provisions of the Employment Exchanges (Compulsory notification of the vacancies) Act to save time.

Before advertising any post, prior approval of the Managing Director is obtained for the same. Generally in the case of posts carrying salary not more than Rs. 500/- advertisement in the local newspapers if any or in regional dailies is considered enough. In all other cases the posts are advertised in all important newspapers having good, all-India circulation as well as important regional dailies with large circulation.

All advertisements are routed through the Director of Advertising and Visual Publicity, Government of India. Copies of all advertisements are displayed on the notice boards of the company. In all cases, candidates who are already in the company's employment and who are otherwise eligible are also permitted to apply along with outsiders.

All applications received in response to advertisements are sorted and registered by the Personnel Department. Initial screening of applications is done by the suitable officer(s). Selected candidates are called for interview, the date and time of interview being fixed with the concurrence of the Selection Committee.

Selection Committee consisting of three or more officers is constituted for purposes of interviewing candidates for different posts depending upon the nature of the post. Independent member(s) of some local standing are also included in the Committee. Additional members other than those specified above will also be co-opted on the Selection Committee, wherever necessary.

During the interview marks are awarded to candidates independently by each member of the selection committee for different qualifications like academic background, sports and games, personality, general knowledge, job knowledge, experience, etc. Departmental candidates considered *prima facie* suitable are also interviewed along with outside applicants and common selection list in the order of merit is prepared. The recommendations of the selection committee are submitted to the competent authority by the Personnel Department for

approval. After obtaining approval of the competent authority appointment orders are issued by the Personnel Department.

Proficiency test is also given to the candidates wherever necessary. In cases where such test is conducted, oral interviews are generally arranged on the basis of performance in the written test and final selection is made taking into consideration the marks awarded both in the written test and the viva-voce.

(iii) Direct Recruitment of daily rated workmen—Skilled, Semi-skilled and Unskilled

The concerned vacancy is notified to the local employment exchange. The candidates deputed by the employment exchange are first interviewed by the Labour Office. In respect of skilled and semiskilled categories, the selected candidates are sent to the respective departments for trade test. In case of unskilled category selection is done by the Labour Officer. The Chief Personnel Officer is the competent authority for approving all selections.

Recruitment is also done through training school in the Shipyard. The apprentices who have undergone training at the industrial training institutes receive further training of one and a half years at the Shipyard Training School and after successful completion of the same, they are absorbed as skilled workmen in their respective trades. The candidates with an educational qualification of S.S.L.C. or Matriculation, preferably with composite mathematics and trained at the Shipyard Training School for a period of three years are absorbed as skilled workmen in the trades of markers, platers, and erectors. These apprentices on absorption as skilled workmen are required to serve the company for a minimum period of five years from the date of their absorption as per the bond executed by them. They are on probation for a period of one year from the date of absorption. If any worker who fails to serve the company for a period of five years as per the bond, he has to pay back the company the stipend, etc., received by him during the period of his training at the Shipyard. On completion of the probationary period, the workers are confirmed basing on the recommendations of the department.

The Shipyard Training School also provides for in-plant

training for candidates who pass out of Industrial Training Institutes so as to enable them to complete their training and obtain their diplomas. If the services of any of these are required in Shipyard, such candidates are taken as semiskilled workers in their respective trades after trade tests, provided vacancies exist. These candidates have to be nominated by the employment exchange. Whenever in-plant trainees are recruited as semiskilled workmen, an equal number of labourers in the respective department are considered for promotion.

Majority of skilled workers, in general, are not recruited from outside source. The company's apprenticeship and training arrangements are considered adequate enough to meet the need for skilled workers. This is also confirmed by the number of apprentices absorbed mostly as skilled workers, with the exception of the last two years, i.e., 1970 and 1971. It has also been decided to give preference in recruitment to the sons of the employees particularly who have met with either fatal accidents or death while in service or death after retirement.

In order to find out how people could get employment in the Hindustan Shipyard, information was collected from the selected group of workers and staff. The data collected is presented in Table 3.4. It is seen from the table that 23.41% of the selected group of workers got their jobs through employment exchange. It may be pointed out in this connection that employment exchanges have existed in India since the Second World War and one would naturally expect that large number of employees at least in urban areas would use them in seeking employment. However, the data shows that less than one-fourth of workers in the Shipyard got jobs through employment exchange. About 17.07% of the workers said they got their jobs through relatives' influence, as is seen that nearly 33% of the workers have some kind of relatives in the Shipyard. 45.85% of workers said that by applying directly to the Shipyard they got their jobs. To a great extent this can be attributed to some indirect influence, as it is not possible for an average man to know of the vacancy and apply. As has been rightly observed by Dr. Baldev Raj Sharma "under the conditions of mass unemployment several candidates are constantly in search of possible avenues of

employment. Such persons usually approach their friends, relatives and acquaintances who are already employed and seek their help in finding jobs. Such friends and relatives usually inform the candidates as soon their organisation is in need of additional hands.⁵ Similarly a study of recruitment patterns in U.S.A. also shows that jobs are found largely through friends or relatives or through application at the gate.⁶ It is opined that there have not been much indications that the development of specialised personnel departments have resulted in far reaching changes in recruiting practices. Through the newspapers only a very small fraction, i.e., 3.41% got jobs. Among the staff also, 53.97% have got their jobs by applying directly. 38.10% got through employment exchange and only a very small percentage 1.59 got their jobs through newspapers as can be seen from Table 3.4.

Those who were in employment but sought jobs in the Shipyard said they did so because they were either temporary or casual workers. About 40% of workers were in temporary service in the previous employment and only about 6% who came to Shipyard were permanent. The most common reason for permanent workers to seek job in the Shipyard was either that they preferred to be in their native place or because they thought the Shipyard would provide better pay, and better future prospects. On the whole, job security was one of the factors on account of which many sought jobs in the Shipyard. In staff about 2% had permanent jobs and about 62% were in temporary service in their previous employment.

In order to have an idea about the rate of accession, figures of accession are collected and presented in Table 3.5 for the years 1957 to 1971 for the skilled, semiskilled and unskilled categories. In the skilled category accession rate was around 3 upto 1966 and in the subsequent years it was around 1. With the semiskilled category it is seen that there was no uniformity of any kind and the accession rate varied

5. *The Indian Industrial Worker*, Vikas Publishing House Pvt. Ltd., 1974, p. 21.

6. Malm, P.T., "Recruiting patterns and the functioning of Labour Markets," Paul Pigors, Charles A. Myers, Malm, P.T., Edited, *Readings in Personnel Administration*, McGraw Hill Book Co. Inc., New York, Second Edition, 1959, p. 284.

TABLE 3.5

CATEGORY-WISE RATE OF ACCESSION

Year	Skilled	Semiskilled	Unskilled	Overall
1957	3.51	27.89	6.51	11.99
1958	3.23	8.45	1.77	4.49
1959	3.12	3.30	0.52	2.38
1960	2.46	15.03	23.16	12.04
1961	3.97	5.78	3.69	4.31
1962	0.81	13.59	4.27	6.67
1963	4.05	3.70	5.73	4.45
1964	1.70	14.05	1.78	4.19
1965	3.32	6.10	7.04	4.80
1966	3.00	0.63	5.35	3.24
1967	1.31	7.84	0.80	2.19
1968	0.44	—	1.72	0.66
1969	1.10	0.42	1.81	1.18
1970	0.28	18.97	2.01	3.27
1971	1.14	36.70	2.46	7.15

from nil to 36.70%. Regarding unskilled category the largest number of accessions was in the year 1960 with 23.16 and in the other years it varied from 1 to 7. Coming to the overall accession rate it was the highest (around 12 in the years 1957 and 1960). In the years 1962 and 1971 it was around 7. In all other years it was less than 5.

In order to know the opinion regarding recruitment policy prevailing in the Shipyard, selected group of officers were interviewed. Some officers said they had no knowledge of any policy. One or two officers were of the opinion that manpower planning was not done on any systematic basis. "There was no definite laid down policy regarding recruitment; people were just recruited blindly and were just kept hanging here and there till such time, suitable placement was found or some vacancy arose." It was also pointed out that category-wise lists of manpower requirement should be done by the management with duties specified before the management recruits any candidate. It may be noted here that an effective system of manpower recruitment involves long range forecasting and planning of the

requirements of manpower in terms of quantity and quality. No doubt, the Hindustan Shipyard has a well laid out recruitment procedure, but it should have a long range manpower planning programme drawn up by taking into consideration all the relevant aspects and it should implement the same as per the predetermined schedules. This will help the process of developing manpower on a systematic basis in the best interests of both the organisation and its employees. Further the differences of opinion (which arise quite often) between the management and the union, regarding whether a particular post has to be filled by promotion, or by recruitment from outside or whether the new recruit is to be the son or relative of an employee of the Shipyard seems to consume considerable time both of management and union. Therefore the management in consultation with the union could come to an agreement regarding the percentage of posts to be filled by promotion, from among the children of employees and from outside.

C. Transfers

A transfer involves the shifting of an employee from one position or place or section or division or department to another without involving any significant change in duties, responsibilities, skills required or remuneration received.

The issue of transfer is very important for it involves many repercussions in any big organisation. As such every organisation must have a systematic transfer policy specially suited to its needs. The policy must contain definite rules and reasons behind transfers. It should be realised that transfer is a valuable technique in manpower management. It may be effected either on account of administrative necessity or for personnel reasons or as a disciplinary measure. Whatever may be the reason, it should be made known to employees who are involved in transfer.

As regards transfers in the Hindustan Shipyard, as could be observed from Table 3.6, are gradually on the decrease. The rate of transfers declined from 4.01 in 1957 to 0.87 in 1971. The most common form of transfers is shifting workers from

TABLE 3.6
NUMBER OF WORKERS TRANSFERRED TO OTHER DEPARTMENTS AND TRANSFER RATE PER 100
EMPLOYED BY CATEGORIES - 1957 TO 1971

Year	Skilled		Semiskilled		Unskilled		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1957	27	2.06	32	2.78	92	7.50	151	4.01
1958	20	1.47	27	2.15	50	4.20	97	2.55
1959	42	2.73	41	3.64	37	3.19	120	3.14
1960	25	1.45	18	1.83	11	0.91	54	1.38
1961	29	1.55	19	1.93	9	0.71	57	1.38
1962	41	NA	34	NA	17	NA	92	NA
1963*								
1964	14	0.61	7	0.84	36	3.37	57	1.36
1965	2	0.09	4	0.50	132	12.36	138	3.24
1966	1	0.04	1	0.16	33	2.10	35	0.84
1967	20	0.76	1	0.16	18	1.80	39	0.92
1968	2	0.08	-	-	30	3.21	32	0.75
1969	2	0.08	1	0.20	35	4.00	38	0.97
1970	3	0.12	-	-	19	2.37	22	0.57
1971	2	0.08	1	0.15	31	4.02	34	0.87

N.A.: Not Available

*Figures not available

one department to another department in the same job. This is done when there is no sufficient work in the department to which they belong and this may be mostly due to shortage of raw materials or break down of machinery, etc. The transfers are mostly on temporary basis but even then the workers seemed reluctant to go from one department to another. Though transfers could not be altogether eliminated the management has reduced them to a large extent. The other types of transfers which are of permanent types are also made when it becomes necessary during the contraction, expansion or on starting of a new department. The persons transferred are those who are suitable for the job of the new departments. It may be pointed out, these periodical transfers involve loss of many mandays, as the workers have to get themselves adjusted to the new environment and to the new trade. Further it should be informed to individuals, and so far as possible their acceptance should be taken, for if a person is forcibly sent, there would be no positive contribution on his part as he becomes prejudiced towards the department and the management.

D. Promotions

One of the most important aspects influencing the organisational environment is its promotion system, which can be thought of as a way of taking notice that some kind of growth has occurred.

The administration of an effective promotion policy is a demanding and complex exercise in human relations and where so many egos are exposed to potential abrasions, some kind of compromise is necessary between an utterly objective appraisal of performance and the dignity of those who have been appraised. The wise management do not promote people automatically nor do they promote without considerable regard for the future consequences. Promotion can be said to be an advancement of an employee to a better job—better in terms of greater responsibilities, more prestige or status—greater skill and especially increased rate of pay and better bonus. Better location or working conditions may also characterise the 'better job' to which an employee seeks 'promotion' but if the job does

not involve greater skill or responsibilities and higher pay it should not be considered as a promotion.⁷

(i) Promotion of suitable Candidates within the Organisation - Staff

In the Hindustan Shipyard to consider promotions among officers and staff a Personnel Committee is constituted with the Financial Advisor and Chief Accounts Officer, Chief Personnel Officer and Chief Draftsman. Manager of the concerned department is co-opted (when the cases of that department are considered) to assist the management. The Chief Personnel Officer is responsible for convening the meeting of the committee. In making the recommendations, the committee is guided by the confidential reports on the employees and other service records. The committee first decides the field of choice, i.e., the number of eligible candidates who should be considered for promotion. The choice is generally limited to the candidates within that particular department but the committee is free to recommend more suitable employees if available in other departments.

In the case of staff, all appointments to higher posts are made from the existing staff as far as possible on the basis of seniority and satisfactory work. Educational qualification is given secondary consideration.

After approval of the recommendations of the committee by the competent authority, orders for promotion are issued by the Personnel Department.

(ii) Promotion of suitable Candidates within the Organisation - Workmen

(a) Promotion from unskilled to semiskilled: In the Hindustan Shipyard promotions are generally made to fill up the vacancies arising in higher categories. Only those unskilled workers who are regular to duties and have a clean record of service during the two preceding years are eligible to sit for the test. A committee consisting of the Manager/Assistant

7. Paul Pigors, Charles A. Myers, *Personnel Administration*, op. cit., p. 308.

Manager of the department ; Foreman of the concerned department ; Chief Training Officer ; and Labour Officer is constituted for this purpose.

The Labour Department prepares a list of candidates satisfying the above conditions and forwards it to the members of trade test committee to proceed with the test. The departmental officers and the Chief Training Officer award marks for muster and conduct. An average of the marks awarded for theory and practical by the departmental officers and the Chief Training Officer is drawn and then marks awarded for muster and conduct are added to this average so as to arrive at the percentage of marks scored by each candidate. Candidates securing 50% and above marks in all the three aspects (i.e., Theory/Practical, muster and conduct) in aggregate, only are considered to have passed the test. The decision of the trade test committee is final.

(b) Promotions from semiskilled to skilled trades : For the semiskilled workers to be promoted as skilled workers—one year of experience is considered essential. The procedure for selection is the same as mentioned in respect of promotion from unskilled to semiskilled trade.

(c) Promotion from skilled trades to skilled selection grades : As per agreement dated 20-12-1957 with the Labour Union, workmen will be promoted to selection grade upto a maximum of 10% of the strength of the skilled category. Secondly, those who have been in the maximum pay scale for one year and those who are upto the standard, which is decided by a test will be eligible to be considered for selection grade. In addition, only those workers who are regular to duties and who have a clean record of service during the two years precedings the test are eligible to sit for the test.

The Labour Department prepares lists of candidates satisfying the above conditions and forward them to the respective departments for testing the candidates. A list of such candidates in the order of merit is prepared by the Labour Department and submitted to the Chief Personnel Officer for approval. After approved by the Chief Personnel Officer, the candidates are promoted to the selection grade in the order of merit to the

extent of vacancies available.⁸

Table 3.7 gives the number and rate of promotions of workers per 100 employed in the Hindustan Shipyard for the years 1957 to 1971. Only promotions involving changes in the category are included. Promotions within the category from one grade to the next grade are automatic for workers with good record and they are not treated as actual promotions. The largest number of promotions (213) among the daily rated workers from semiskilled to skilled was in the year 1959 with the rate of 18.93. But the rate of promotions was the highest in 1968 with 22.90. In the last three years the rate was less than 10.

Promotions from unskilled to semiskilled were maximum in the year 1971 (124) and the rate of promotion also recorded the maximum in this year with 16.06. However for the years 1957 and 1958 it was less than 6, for the subsequent four years it was less than 4, then onwards it increased and it was the lowest in 1965 with 0.28 where only three unskilled workers were promoted to semiskilled category. On the whole the rate of promotions never reached 11 during the period with the exception of 1971.

Majority of promotions from daily rated trades to monthly rated trades were from the skilled category. In the year 1963 as many as 124 unskilled workers were promoted. The overall rate of promotions although declined from 7.01 in 1957 to 3.18 in 1971, mostly fluctuated from year to year.

As per the agreement dated 20-12-1957 wherever there is

-
8. The Channels for promotion among workers are as follows :
- i. Skilled workmen to chargemen ;
 - ii. Skilled workmen to selection grade ;
 - iii. Semiskilled to skilled : (a) Assistance to skilled category in their respective trades, (b) Greasers to Crane Drivers, (c) Dollymen/Heaters to Rivetters, (d) Hammermen/Operators to Blacksmith ; Hullmen of Hull shop/to Plater II, (e) Khalasi to Serang/Riggers, (f) Brush Painters to skilled/Letter Painters, (g) Muccadam to Head Muccadam, (h) Semiskilled slingers to Muccadam (redesignated)
 - iv. Unskilled to Semiskilled : (a) Junior Khalasi to Khalasi, (b) Slinger to Muccadam/all other Semiskilled grades, (c) Boat Khalasis to Boat Tindals, (d) Labourers to all Semiskilled trades and also for Slinger and Junior Khalasi, (e) Sweepers to Muccadam in Sanitary and Yard Conservancy Departments.

TABLE 3.7

Year	Promotions among daily rated workers				Total Rate	Number of promo- tions to monthly basis from daily rated workers				Total No. of Promo- tions	Promotion rate per 100	
	Ssk to SK		Usk to Ssk			Sk	Ssk	Usk	Total			
	No.	Rate	No.	Rate								
1957	168	14.60	70	5.36	238	9.68	25	-	1	26	264	7.01
1958	2	0.16	70	5.88	72	2.94	10	2	2	14	86	2.26
1959	213	18.93	21	1.81	234	10.25	1	-	2	3	237	6.20
1960	150	15.23	32	2.65	182	8.29	8	-	5	13	195	5.20
1961	72	7.29	33	2.59	105	4.02	3	-	5	8	113	2.73
1962	165	17.26	36	2.95	201	4.89	14	1	1	16	217	5.28
1963	125	13.16	46	3.82	171	4.05	28	2	124	154	325	7.79
1964	176	21.50	73	6.84	249	5.94	36	2	2	40	289	6.89
1965	158	21.12	3	0.28	161	3.78	19	1	4	24	185	4.35
1966	132	20.65	26	2.44	158	3.79	26	2	-	28	186	4.44
1967	8	1.12	100	10.40	108	2.55	11	-	2	13	121	2.85
1968	143	22.90	19	2.03	162	3.81	26	-	9	35	197	4.64
1969	22	4.59	26	2.98	48	1.20	19	-	1	20	68	1.23
1970	36	6.67	58	7.31	94	2.44	12	1	1	14	108	2.81
1971	57	8.58	124	16.06	181	4.64	30	1	12	43	124	3.18

an efficiency-bar in the scale of pay, the worker is tested for efficiency in his own trade by the foreman for crossing the efficiency bar. Any worker who is tested and found unfit to cross the efficiency bar is allowed to appeal to the Labour Officer within 30 days from the time he is informed. A committee consisting of Technical Officer above the rank of a foreman of the department, Chief Training Officer, and Labour Officer examine such cases and its decision is final. Those who are not found fit to cross the efficiency-bar are again tested after a period of one year.

In order to know if any worker or staff had any grievance in regard to promotion, information was elicited from the selected group of workers. It was noted that majority of workers and staff had grievance in regard to promotion. They felt that right man was not promoted. Favouritism and nepotism influenced promotions in shipyard. In fact one of the reasons for not working efficiently as opined by them, was frustration on the part of workers and staff as they saw no chance of promotion. The officers also were not altogether happy with the way the promotions were being carried out in the Hindustan Shipyard. It may be noted here, in this context that if manpower development is to have any significant purpose to an organisation, not only must it occur in an orderly fashion, but also it must contribute to the security and productivity of that organisation. Manpower development programme should incorporate techniques designed to contribute to the stability in the workforce, create interests and positive morale, and improve the employee's loyalty to the organisation. A definite, well defined system and plan for promotion should be drawn up in consultation with the union and given wide publicity among the employees, in order to win their confidence and co-operation.

E. Labour Turnover

Labour turnover is an index of organisational health. Too much or too little labour turnover is not a sign of good health. There are two types of turnover—internal turnover in the form of transfers or promotions within the organisation and external turnover in the share of the employees leaving the

organisation for different reasons—resignations, retirements, deaths, etc. Too much of the latter type of turnover should be of concern to the management that something is wrong somewhere in the organisation and needs remedial action. Improvement in the working conditions, welfare activities, fringe benefits, social insurance schemes, leave and holidays, housing facilities, better wages, etc., may go a long way in providing a contented labour force and thus minimising external turnover to a large extent. This will help the company in saving money which will have to be spent in recruiting and training new employees.

In the case of the Hindustan Shipyard, separation rate in the skilled category as could be seen in Table 3.8 varied from 2 to 3, but never reached 4 during the period under study. Separation rate for the semiskilled category on an average was 4. The rate of separation for the unskilled category in many years was around 3. Regarding overall separation rate there was not much of fluctuation in any of the years as it varied between 2 and 4 but never reached 5 during the period from 1957 to 1971.

TABLE 3.8

CATEGORY-WISE RATE OF SEPARATION

Year	Skilled	Semiskilled	Unskilled	Overall
1957	3.35	6.67	2.29	4.01
1958	3.74	6.30	2.52	4.20
1959	1.43	2.84	1.98	2.02
1960	2.45	3.45	7.44	4.25
1961	2.89	3.44	4.24	3.44
1962	3.56	4.00	3.22	3.06
1963	3.91	3.70	1.83	3.65
1964	2.96	3.45	2.72	3.12
1965	3.69	3.25	4.13	3.62
1966	2.87	3.46	1.97	3.16
1967	2.90	3.76	1.61	2.74
1968	2.80	3.99	2.47	2.84
1969	2.40	3.54	2.04	2.46
1970	2.63	3.31	1.63	2.86
1971	2.15	2.24	1.94	2.14

The outgoing workers in the Hindustan Shipyard are further classified according to cause, and their number and percentage are shown in Table 3.9. It is heartening to note that the percentage of workers resigned from job declined from 42.39 to 13.41 during 1957–71. Workers declared medically unfit were on the increase from 1.99% in 1957 to 14.63% in 1971. Superannuation also recorded an increase from 3.31 to 28.05. Outgoings due to death increased from 17.88% to 35.37%. It is interesting to note that dismissals due to long unauthorised absence which had reached its maximum of 40.57% in 1959 have declined to 8.54% in 1971. Thus this table makes it clear that very few people want to resign from the service of the Shipyard.

The outgoing workers were further classified into skilled, semiskilled and unskilled categories and are shown in Table 3.10 according to causes. It is seen from this table that a large number of outgoing workers, were from skilled category. Most of the outgoings were due to resignation in 1957, 1958, 1963, 1964 and 1969. Resignations by skilled workers were more than semiskilled and unskilled workers in most of the years and in the remaining years the outgoings were due to medical unfitness and superannuation. Among the unskilled workers death was the major reason for outgoings in 1957, 1962, 1964, 1967 and 1969. In the remaining years medical unfitness and superannuation were to a large extent responsible. It was elicited that in welding, plumbing and engineering departments large number of resignations took place and here the management needs to make a more detailed study so as to find out the causes for high rate of resignation. Generally the cause could be availability of better jobs with higher emoluments elsewhere.

TABLE 3.9

OUTGOING WORKERS CLASSIFIED ACCORDING TO CAUSE, NUMBER AND PERCENTAGE IN TOTAL - 1957 TO 1971

Year	Resignation		Medically unfit		Superannua- tion		Death		Dismissal (mostly due to long unau- thorised absence)		Total	
	Num- ber	Per- cen- tage	Num- ber	Per- cen- tage	Num- ber	Per- cen- tage	Num- ber	Per- cen- tage	Num- ber	Per- cen- tage	Num- ber	Per- cen- tage
1957	64	42.39	3	1.99	5	3.31	27	17.88	52	34.44	151	100.00
1958	82	51.25	6	3.75	5	3.12	20	12.50	47	29.38	160	100.00
1959	18	23.38	6	7.78	3	3.89	18	23.38	32	41.57	77	100.00
1960	16	9.64	49	29.52	68	40.96	16	9.64	17	10.24	166	100.00
1961	16	11.27	27	19.01	30	21.13	27	19.01	42	29.58	142	100.00
1962	28	19.05	19	12.93	18	12.24	36	24.49	46	31.29	147	100.00
1963	52	37.68	14	10.14	17	12.32	24	17.39	31	22.47	138	100.00
1964	42	33.33	13	10.32	11	8.73	31	24.60	29	23.02	126	100.00
1965	41	26.26	13	8.33	6	3.85	33	21.16	63	40.38	156	100.00
1966	31	27.19	11	9.65	22	19.30	27	23.68	23	20.18	114	100.00
1967	29	25.66	9	7.96	21	18.58	39	34.52	15	13.28	113	100.00
1968	15	12.71	8	6.78	50	42.37	21	17.80	24	20.34	118	100.00
1969	24	25.00	15	15.63	18	18.75	20	20.83	19	19.79	96	100.00
1970	16	16.49	9	9.28	27	27.84	29	29.90	16	16.49	97	100.00
1971	11	13.41	12	14.63	23	28.05	29	35.37	7	8.54	82	100.00

Employment Trends

TABLE 3.10
OUTGOING WORKERS CLASSIFIED ACCORDING TO CAUSE - 1957 TO 1971

Year	Resignation			Medically fit			Superannua- tion			Death			Dismissals (mostly due to unauthorised absence)						Total		
	S	SS	US	T	S	SS	US	T	S	SS	US	T	S	SS	US	T	S	SS	US	T	
1957	16	41	7	64	1	-	2	3	5	8	6	13	27	14	30	8	52	44	77	30	151
1958	27	43	12	82	1	2	3	6	4	7	5	8	20	12	29	6	47	51	79	30	160
1959	2	13	3	18	2	2	2	6	2	6	1	8	18	10	13	9	32	22	32	23	77
1960	6	9	1	16	11	8	30	49	14	5	2	9	16	6	7	4	17	42	34	90	166
1961	9	6	1	16	11	2	14	27	11	13	6	10	27	9	17	16	42	54	34	54	142
1962	16	10	2	28	10	2	7	19	12	14	4	16	36	17	16	13	46	69	38	40	147
1963	29	17	6	52	9	3	2	14	11	13	7	4	24	19	7	5	31	81	35	22	138
1964	28	7	7	42	6	3	4	13	7	13	3	15	31	14	13	2	29	68	29	29	126
1965	32	3	6	41	5	2	6	13	3	19	3	11	33	29	13	21	63	88	24	44	156
1966	22	5	4	31	7	3	1	11	14	22	10	7	39	9	5	9	23	71	22	21	114
1967	21	5	3	29	4	2	3	9	17	22	10	7	39	9	4	2	15	73	24	16	113
1968	10	3	2	15	6	-	2	8	32	13	4	4	21	10	10	4	24	71	24	23	118
1969	23	1	-	24	11	2	2	15	10	10	4	6	20	7	7	5	19	61	17	18	96
1970	12	4	-	16	6	1	2	9	12	24	3	2	29	12	3	1	16	66	18	13	97
1971	7	4	-	11	6	3	3	12	15	18	5	6	29	7	-	-	7	53	14	15	82

S = Skilled; SS = Semiskilled; US = Unskilled; T = Total

S = Skilled; SS = Semiskilled; US = Unskilled; T = Total

DIMENSIONS OF DISCIPLINE AND EFFICIENCY

A. Organisational Structure

Dimensions of discipline and efficiency in any enterprise are substantially influenced by the structure of its organisation. The word organisation means “the systematic arrangement of parts for a defined purpose.”¹ A good organisational structure for the enterprise as a whole is essential and it is the first step for clarification and understanding of organisational relationships. The organisational set up of any industrial unit is designed to a large extent depending upon its functional objectives. No two organisational set ups could be expected to be exactly alike as the objectives differ. It is for this reason that one does not always find the same pattern of organisation even in units of the same industry.

Basically, the existing organisational structure of the Hindustan Shipyard has been built up from the nucleus taken over from Scindias in 1952. In some respects it was modified in consultation with the French experts with a view to meet the growing needs of work in each department. However, a study

1. Urwick L.F. and Hunt John W., “Growth and Organisation,” *Handbook of Business Administration*, McGraw Hill Book Company, New York, 1967, pp. 2-45.

made by the Ad hoc Committee² in 1966 revealed, that though by and large, the organisational set up has met the requirements of the yard for its current level of production it was deficient in some respects. The report pointed out that it lacked cohesiveness and it was not as closely knit as it ought to be; points of control were not clearly defined; delegation of authority was inadequate; distribution of work load and responsibility was uneven; and career opportunities of the personnel were limited. Therefore the Ad hoc Committee felt, it was necessary to provide an organisational structure which would ensure these requirements. The committee had a detailed discussion on the pattern of organisation best suited to the functional needs of the unit, taking into account the potentialities of existing personnel. A revised organisation chart was drawn up showing broadly the division of work and areas of responsibility, distribution of functions and delegation of authority and the strength of officers required eventually for a production programme of six ships per year. By and large the proposals drawn up for strengthening and rationalising the organisational structure appeared to be sound and hence they were implemented. But the actual expansion and placement of staff were delayed as it was thought that only after a critical review from time to time on the basis of contemporary requirements and the patterns of development it could be implemented.

In the revised organisational structure there are six officers reporting to the Managing Director. They are: (1) Director of Ship Construction; (2) Financial Advisers; (3) Company Secretary; (4) Commander of the Yard; (5) Chief Training Officer; and (6) Chief Personnel Officer.

Director of ship construction is the senior most in the second tier of the hierarchy and he is in-charge of the entire production mechanism of the Yard. He has five section officers to assist him. Chief Draftsman who is in-charge of design and drawing offices is assisted by the Naval Architect in charge of design and three deputy chief draftsmen controlling the various sections of the

2. In February 1966, the Ministry of Transport and Shipping of the Government of India set up a high powered Ad hoc Committee under the Chairmanship of Shri M.P. Pai to examine the working of the Hindustan Shipyard, as the Ministry of Transport and Shipping was seriously concerned over its affairs – particularly the high cost of construction and low output.

drawing office. Chief Shipyard Manager controls the entire hull-shop, hull-outfit, welding and berth construction departments. Chief of Planning and Production Control handles the production planning and control and for this purpose he is assisted by two managers who between themselves tackle the detailed work connected with planning and control of production. Chief of Engineering Electrical and Ship Repairs, is assisted by three managers each in charge of Engineering, Electrical and Ship Repair departments. Chief Controller of Stores is in charge of the entire materials management branch. He is assisted by the Purchase Controller, the Materials Controller, Inspector of Stores and Machinery and Development Officer.

Financial Advisor and Chief Accounts Officer is responsible for financial advice and accounting, cost accounting and internal check. He is assisted by the Deputy Chief Accounts Officer, the Cost Accounts Officer and the Internal Audit Officer.

Company Secretary assists the Managing Director and is in-charge of general administration, public and owners' relations and he is also in-charge of Liaison Office at Delhi. He is assisted by four officers.

Commander of Yard and Vigilance Officer is assisted by the Assistant Commander of the Yard with two officers reporting to the latter – one for security and the other for watch and ward, fire service and conservancy.

Chief Training Officer is in-charge of the entire training arrangements and is assisted by an Assistant Training Officer and three Instructors.

It will be seen that the total number of officers reporting to the Managing Director is six and those reporting to the Director of Ship Construction is five. In this arrangement there is a provision for larger number of officers to report both to the Managing Director and the Director of Ship Construction.

Personnel Department

The Personnel Department in any organisation has an enormous role to play in the promotion of good human relations, acting in a way that gives the workers confidence in the management which in turn improves their morale and productivity.

However, the form and shape the personnel administration activity takes differs greatly from company to company and to be effective, it must be tailored to fit the individual needs of each company.

The Chief Personnel Officer who is responsible for the Personnel Administration in the Hindustan Shipyard works directly under the authority of the Managing Director. Under him there are four departments Personnel, Labour, Welfare and Time office. While the Personnel Department deals with staff and officers, the Labour Department deals with daily rated workers. The functions of the two departments are: recruitment and placement, increments and promotions, maintenance of personnel records, disposal of grievances, disciplinary proceedings, maintenance of leave, execution of management approved personnel policy, wage and salary administration, negotiation with trade unions, adjudication and conciliation, implementation of labour laws, implementation of safety and accident prevention programmes and instituting checks on absenteeism and idling away of time by workmen. The Labour Welfare Department looks after the welfare amenities like housing, education, medical aid, transport, canteen facilities, etc. Time Office is a liaison between management and labour. It maintains the daily information about the attendance position and sends its report next day with all details.

The efficient working of the personnel branch is very vital for the long run success of the organisation. Of the two categories, operative and managerial, the operative functions include the activities of procuring, developing, utilising and maintaining, an efficient workforce. The efficiency of the workers of the Shipyard cannot be denied. But the problem concerned is 'getting work done' and thus 'increasing productivity' which is to be solved by an effective personnel management. Another important problem is the flight of trained personnel from the yard to more lucrative jobs elsewhere. During the six year period 1960-66 the Ad hoc Committee,³ noticed that as many as 35 officers have left the Shipyard and joined other organisations. This flight of trained personnel, manning

3. Report of the Ad hoc Committee, op. cit., Chapter I (typed page), 1966, p. 10.

key positions is injurious to the well being of the organisation. Hence, it is necessary that the personnel department should investigate and suggest appropriate measures to the top management so as to arrest the unregulated movement of such key personnel.

Hindustan Shipyard is a giant organisation employing 5,372 employees (as on the 31st December, 1971) in different positions in its hierarchy of operations and this particularly emphasises the need for an efficient personnel management. However and inspite of the increasing importance of an efficient utilisation of human resources, cost considerations, detailed specifications of requirements of different jobs and time and motion studies in almost all activities are absent in the Shipyard.

The quality of management no doubt is the organisation's greatest asset, but success of any organisation largely depends upon its workforce and the inner motivation they receive from the management. Work can be meaningful and satisfying to the workforce only when it elicits and stimulates their inner motivations. Only then their experience on the job will become an integral element in total life experience during which they move towards their full potential as persons.

Therefore to know how the workers liked their job, their supervisor, management and their organisation, information was collected from the selected group of workers. It may be pointed out that these opinions will undoubtedly have their impact on discipline, absenteeism, morale and productivity. Table 4.1 shows workers' views regarding their liking for the job. 40.49%

TABLE 4.1
LIKING TOWARDS JOB

	(In Percentage)			
	Skilled	Semi-skilled	Unskilled	Overall
Very much	42.64	35.00	38.89	40.49
Pretty good	23.26	25.00	16.67	22.44
Not so good	27.90	37.50	33.33	30.73
Don't like it	6.20	2.50	11.11	6.34
Total	100.00	100.00	100.00	100.00

said they liked their job very much, 22.44% said their present job was pretty good, 30.73% felt their job was not so good and only a small fraction, 6.34% said that they did not like the present job.

Information was also collected from the workers regarding their impression about their immediate boss, i.e., the supervisor, for the dissatisfaction on the part of worker may be a symptom of unsatisfactory relationship between the supervisor and worker. The workers were asked if they thought the supervisor was interested in their problems. The response is presented in Table 4.2. 88.28% of workers thought that their supervisors were interested in them and their problems. 92.68% of workers said that the supervisor understood the job he supervised (Table 4.3). When asked if their supervisor complimented them when they did a good job, except for 16.59%, the remaining workers said they were complimented when they did a good job (Table 4.4). Most of the workers were also of the opinion that the supervisor got along well with others in his department (Table 4.5). Further 77.07% (as seen in Table 4.6) said that supervisor took prompt action of their complaints and 81.45% said that they had a friendly feeling towards him (Table 4.7). Thus from the above information it is evident that the workers, on the whole, had a good impression of their supervisor and had respect towards him.

They were also asked how much interest they thought management took in them. Their opinion is presented in Table 4.8. 58.54% said that the management is interested in them. They were asked if they liked their children to be employed in the Shipyard. 71.22% of workers said

TABLE 4.2
OPINION REGARDING SUPERVISOR'S INTEREST
IN WORKERS' WELFARE

	(In percentage)			
	Skilled	Semiskilled	Unskilled	Overall
Interested	85.27	92.50	94.44	88.28
Not Interested	10.07	5.00	5.55	8.28
No opinion	4.66	2.50	0.01	3.44
Total	100.00	100.00	100.00	100.00

TABLE 4.3
SUPERVISOR'S ABILITY TO UNDERSTAND THE JOB
(In percentage)

	Skilled	Semiskilled	Unskilled	Overall
Yes	96.10	100.00	100.00	92.68
No	1.55	—	—	5.36
Don't know	2.35	—	—	1.96
Total	100.00	100.00	100.00	100.00

TABLE 4.4
COMPLIMENTS FROM SUPERVISOR
(In percentage)

	Skilled	Semiskilled	Overall	Unskilled
Most of time	55.03	60.00	72.22	59.02
Sometimes	24.03	25.00	25.00	24.39
Seldom or Never	20.94	15.00	2.78	16.59
Total	100.00	100.00	100.00	100.00

TABLE 4.5
SUPERVISOR'S ADJUSTABILITY WITH HIS PEOPLE
(In percentage)

	Skilled	Semiskilled	Unskilled	Overall
Yes	84.40	87.50	91.66	86.34
No	10.07	12.50	5.55	9.76
Can't say	5.53	—	2.79	3.90
Total	100.00	100.00	100.00	100.00

TABLE 4.6
PROMPT ACTION TAKEN ON COMPLAINTS
(In percentage)

	Skilled	Semiskilled	Unskilled	Overall
Yes	72.09	80.00	91.66	77.07
No	13.95	17.50	8.33	13.35
Can't say	13.96	2.50	0.01	9.58
Total	100.00	100.00	100.00	100.00

TABLE 4.7
FEELING OF SUPERVISOR

	(In percentage)			
	Skilled	Semiskilled	Unskilled	Overall
Friendly	79.07	85.00	86.11	81.45
No feeling	18.60	12.50	8.33	15.61
Unfriendly	0.77	—	5.55	1.46
Don't know	1.56	2.50	0.01	1.48
Total	100.00	100.00	100.00	100.00

TABLE 4.8
MANAGEMENT'S INTEREST OVER THE EMPLOYEE

	(In percentage)			
	Skilled	Semiskilled	Unskilled	Overall
A real interest	18.60	22.50	36.11	22.44
Average interest	36.43	40.00	30.55	36.10
Not much interest	41.08	32.50	25.00	36.59
No opinion	3.89	5.00	8.34	4.87
Total	100.00	100.00	100.00	100.00

they would like their children to get employment in the Shipyard (Table 4.9). Regarding prospects for steady work at the Shipyard, information was collected. Only 27.81% felt that prospects for steady work were very good whereas 38.54% felt that prospects were not so good. Finally they were asked what their family thought of the Shipyard. 43.90% of workers said that their family thought the Shipyard was a good place to work whereas 34.63% said their family thought that the Shipyard was a poor place to work.

B. Discipline

'Discipline' in the broad sense means orderliness.⁴ Good discipline has been defined as an "orderly conduct of affairs by

4. Ordway Tead, "Constructive Discipline", *Readings in Personnel Administration*, Ed. Pigors, Myers & Malm, McGraw Hill Book Co., New York, pp. 389-390.

the members of an organisation who adhere to its necessary regulations because they desire to cooperate harmoniously in forwarding the ends which the group has in view and willingly recognise that, to do this their own wishes must be brought into reasonable unison with the requirements of the group in

TABLE 4.9
EMPLOYMENT OF CHILDREN IN THE SHIPYARD
(In Percentage)

	Skilled	Semiskilled	Unskilled	Overall
Like it	40.31	35.00	63.88	43.41
Don't like it	15.50	22.50	8.33	15.61
Like it because it is difficult to get jobs elsewhere	30.23	27.50	19.44	27.81
Can't say	13.96	15.00	8.35	13.17
Total	100.00	100.00	100.00	100.00

action.⁵ Discipline is a fundamental requirement for the people working in any organisation. But human factor is such that it often fails to discipline itself. At least there will be one employee who will not follow the rules or instructions and thus become responsible for acts of indiscipline. This is where the question of taking disciplinary action against the employee becomes necessary for the management. No doubt, it is believed that peak performance in every organisation results only when the employees themselves willingly carry out the instructions issued by the management and abide by the rules of conduct and standards of work which have been established to ensure the successful attainment of organisational objectives.⁶ Then neither authority should be exercised arbitrarily nor rules should seem to be unreasonable.

However, indiscipline among the workers is one of the most important problems faced by the Indian industry. The

5. Bramblett Earl R., "Maintenance of Discipline," *Management of Personnel*, Quarterly, Vol. 1, No. 1, Autumn, 1961, p. 10.

6. Paul Pigors, Charles A. Myers, *Personnel Administration*, op. cit., Seventh Edition, 1973, p. 326.

causes are several and varied and could be traced to the changes in the industrial, social and religious spheres that have come in the wake of independence. Illiteracy on the part of Indian workers also contributed to some extent for their indisciplinary behaviour. The brought up of a worker, educational background, understanding of a company, political, economic, social, cultural and religious environment have a great deal of influence on the worker's discipline or indiscipline.

The procedure of disciplinary action in the Hindustan Shipyard is such that first oral warning is given within the department by the supervisor. If the indiscipline is grave and the foreman feels that the worker deserves punishment more than oral warning, then he informs the Labour Officer through the Assistant Manager of the Department. The Labour Officer makes a preliminary enquiry and if he finds a *prima facie* case, he books the case against the worker. After booking the case, the labour officer issues a charge sheet to the worker informing about the charge and asking for his explanation. After receiving his explanation it is thoroughly examined by the Labour Officer and if he feels that the explanation given by the worker is not satisfactory then the Labour Officer issues a show cause notice, informing him once again the charge made against him and his dissatisfaction over his explanation and asking him why such and such action should not be taken against him as per the standing orders. Before issuing the show cause notice the Labour Officer, has to get the approval of the Chief Personnel Officer, regarding the punishment which he proposes to impose. If the worker does not show any reason, why action should not be taken against him, then the Labour Officer issues a memo after suspending him or dismissing him.

But in certain cases when there is grave misconduct,⁷ a domestic enquiry is conducted to find the facts. The Enquiry Officer is appointed by the Chairman and Managing Director. The Enquiry Officer after his enquiry submits his report to the Managing Director recommending whether the worker deserves severe punishment or not. According to the findings of the re-

7. Generally indiscipline is called grave, where a worker unauthorisedly absents himself for a longtime or misbehaves with the superiors or is involved in the theft of valuable articles, etc.

port, action is taken. In case the punishment is dismissal, it has to be approved by the Chairman and Managing Director. But upto suspension the Chief Personnel Officer is empowered to take action. Generally, before any severe punishment is taken, the management also informs the union.

In the subsequent pages an effort is made to present the facts regarding indiscipline among employees in the Hindustan Shipyard from 1957 to 1971 as revealed from a study of the records available in the Labour Office. Records are maintained regarding the disciplinary actions that were met by written warnings, suspensions and dismissals. No information is available from 1962 as regards the nature of disciplined acts that were met by oral warnings.

Information as to the total number of cases of indiscipline among workers of various categories is collected and presented in Table 4.10 along with the rate of indiscipline. It is seen in the years 1957 and 1958 the rate of indiscipline was as high as 9.42 and 8.30 respectively. However, in the subsequent years it decreased and even reached to 2.82 in 1964. Again in 1968, it increased to 8.49 followed by a decline (2.64) in 1971. It may be noted here that the employer-employee relations were much strained during 1968 and 1969. It is clear from this table, that indiscipline was more among semiskilled and unskilled workers, as compared to skilled workers.

In order to have a more detailed picture of indiscipline among workers, the data has been further analysed by departments from 1957 to 1977. No department had consistently a high rate of indiscipline for all the years. However it is observed that during 1971, the rate of indiscipline was significant in welding (6.42), Loft (7.14) and Watch and Ward (12.76) departments. In all other departments it was less than five. It is further seen that if in any department the indiscipline rate was high in any year, there was a fall in the subsequent years. This drop could be the result of the disciplinary action taken by the management. However, the nature of discipline in a department depends not only on workers but on the efficiency with which supervision is conducted, as also the attitude of management in general.

The above information is further classified categorywise

TABLE 4.10
 CASES OF INDISCIPLINE AMONG WORKERS - NUMBER AND RATE PER 100 EMPLOYED
 CATEGORYWISE - 1957 TO 1971

Year	Skilled		Semiskilled		Unskilled		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1957	87	6.63	144	12.51	124	9.50	355	9.42
1958	80	5.88	112	8.93	124	10.42	316	8.30
1959	55	3.58	49	4.36	104	8.97	208	5.44
1960	41	2.40	38	3.86	93	7.69	172	4.41
1961	61	3.27	41	4.15	67	5.26	169	4.09
1963	62	3.21	47	4.96	47	3.79	156	3.79
1962	35	1.69	23	2.44	31	2.58	89	2.11
1964	25	1.09	41	4.90	52	4.90	118	2.82
1965	121	4.96	85	11.36	76	7.16	282	6.63
1966	111	4.49	51	8.03	74	6.94	236	5.66
1967	64	2.55	27	4.24	36	3.62	127	3.06
1968	162	6.45	68	11.45	112	12.10	342	8.49
1969	97	3.80	28	5.74	61	6.85	186	4.73
1970	128	5.11	26	4.82	41	5.17	195	5.08
1971	50	2.03	22	3.31	31	4.02	103	2.64

and is seen that though the rate of indiscipline among skilled workers on the whole was low when compared to semiskilled and unskilled workers, in certain departments, viz., welding, erection, plumbing, engineering, joiners and carpenters, and maintenance, indiscipline among skilled workers for most of the years was more than semiskilled and unskilled workers. A glance at the turnover figures also shows that in most of the above departments there was a higher turnover rate as compared to other departments.

A study of the nature of indiscipline is very important, as some indiscipline may be of more serious nature requiring the immediate attention of the management. Therefore, indiscipline among workers according to its nature is studied and presented in Table 4.11. The nature of indiscipline prevalent among employees of the Hindustan Shipyard is classified into unauthorised absence, absconding from duty, late coming, negligence in duty, sleeping while on duty attending duty in drunken state, refusal to do the entrusted work, handing over tools in broken condition, improper behaviour and violation of rules of conduct, deceiving authorities, thefts and irregularities in punching cards. It is seen from the table that unauthorised absence in all years formed the chief feature of indiscipline. But its percentage was not uniform and fluctuated between 25.48% in 1959 and 81.41% in 1962. Unauthorised absenteeism includes cases like absenting from duty without prior sanction, extending leave without prior sanction, etc. Management did take some action to reduce unauthorised absence. More than 40 to 50% of the cases of unauthorised absenteeism met with written warnings. Long unauthorised absence was also met with dismissal and suspension. However, the percentage of cases of unauthorised absenteeism met with dismissal declined from 11.22 in 1967 to 8.57 in 1971. Suspension also is resorted to by the management so as to reduce unauthorised absenteeism. As is seen from the table when dismissals were less cases of suspensions were more.

Under 'absconding from duty,' who left duty before, for hours together were included. These cases were met mostly with written warnings. There were no cases of dismissals in any of the years and even cases of suspension were very limited

in respect this nature of indiscipline. Late coming, though very negligible as can be seen from Table 4.12 in most of the years, registered a sudden spurt in the years 1969 and 1970. But in the year 1971 there were no cases of late coming (Table 4.11).

‘Sleeping on duty’ is mostly committed by workers on night duty. Until year 1961 it was to the extent of 5 to 8% but there after it was around 1% except for the year 1963 when it reached 6.75%. In the years 1969, 1970 and 1971 no cases were reported. Attending duty in drunken state is of serious nature as it has a lot to say on the morale of the employees. But its percentage was always below two. There were no such cases in 1969, 1970 and 1971. Most of the time such cases met with suspension and this could be the reason for their absence in 1969, 1970 and 1971. Improper behaviour and violation of rules of conduct, on the whole has not shown any improvement. It was the highest in the year 1963, i.e., 17.98%. This includes cases like workers using abusive language against, their superiors, behaving rudely or interfering with other people’s work, violating the rules laid down by the company, etc. This type of indiscipline has a lot to do with the family background, and their low standards of education. Unless there is complete mental revolution on the part of the workers, a complete stop of this type of behaviour is beyond the reach of the organisation.

Cases of deceiving authorities form 3% on an average. Most of the workers who deceived the authorities were suspended and a few were dismissed. Thefts were showing an upward trend in many of the years. Some were given written warnings and others were suspended and dismissed depending upon the severity of the theft.

On the whole as can be seen from Table 4.12 there was no drastic decrease in written warnings in any of the years. From the period 1962 to 1971 it never went below 50% and it was highest in the year 1966 amounting to 72.03% and lowest in the year 1960 being 30.82%. The percentage of cases of suspension has declined from 26.48 in 1957 to 16.50 in 1971. The percentage of dismissals as can be seen from Table 4.13 was on an average about 13 from 1957 to 1960 but then it went up drastically during 1961, 1962, 1963, 1964 and 1965 with more than 20% on an average, but again showed a decline from 1966 and it

TABLE 4.12
NATURE OF ACTION TAKEN AGAINST INDISCIPLINE AMONG WORKERS - 1957 TO 1971

Year	Oral warning		Written warning		Suspension		Penalty		Cost Recovery		Dismissal		Total	
	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage
1957	13	3.66	173	48.73	94	26.48	29	8.17	1	0.28	45	12.68	355	100.00
1958	20	6.33	182	57.60	60	18.99	3	0.95	5	1.58	46	14.55	316	100.00
1959	38	18.27	94	45.19	39	18.75	1	0.48	4	1.92	32	15.39	208	100.00
1960	10	5.81	53	30.82	38	22.09	53	30.82	1	0.58	17	9.88	172	100.00
1961	-	-	55	32.54	72	42.61	-	-	-	-	42	24.85	169	100.00
1962	NA	NA	88	56.41	22	14.10	-	-	-	-	46	29.49	156	100.00
1963	NA	NA	45	50.56	13	14.61	-	-	-	-	31	34.83	89	100.00
1964	NA	-	62	52.54	27	22.88	-	-	-	-	29	24.58	118	100.00
1965	NA	-	166	58.87	53	18.79	-	-	-	-	63	22.34	282	100.00
1966	NA	-	170	72.03	43	18.22	-	-	-	-	23	9.75	236	100.00
1967	NA	-	73	57.48	39	30.71	-	-	-	-	15	11.81	127	100.00
1968	NA	-	215	62.87	103	30.12	-	-	-	-	24	7.01	342	100.00
1969	NA	-	91	48.92	76	40.86	-	-	-	-	19	10.22	186	100.00
1970	NA	-	129	66.15	50	25.64	-	-	-	-	16	8.21	195	100.00
1971	NA	-	79	76.70	17	16.50	-	-	-	-	7	6.80	103	100.00

NA = Not Available

was only 6.8% in the year 1971.

Planning for disciplinary action is a responsibility of the top management so as to correct undesirable behaviour by thoughtless individuals. A chief executive who believes that high morale and voluntary participation are prerequisites for peak efficiency naturally frames a positive policy of discipline. The policy should be simple and contain clearcut written procedure. The sequence of disciplinary action should be specified in steps in the procedure, so that use of disciplinary action can primarily be as a means of reduction of indiscipline among the workers. The workers of the Hindustan Shipyard are amenable to discipline and have in general, due respect and regard towards the rules and regulations of the company.

The management of the Shipyard is also eager to instill a high sense of discipline among the workers. Prompt disciplinary action is inculcated through the standing orders. Management never hesitated to deal severely with cases of corruption and other kinds of misconduct involving moral turpitude. In dealing with disciplinary matters the principles of natural justice were scrupulously observed.

In order to know how the workers felt about the disciplinary action taken against some workers by the management, i.e., whether they thought it was justifiable, or not; information was collected and is presented in Table 4.14. It is seen from the table that 51.71% of the total number of workers said it was justifiable and only 1.46% were of the opinion that it was victimising. From the selected group, disciplinary action was taken against only 5.37%. On further interviewing it was learnt that there were no cases on which the workers had gone to court of law against the disciplinary action taken by the management. Thus on the whole it can be said that the workers did not charge that the management was prejudiced while taking disciplinary action.

The opinion of the selected group of officers regarding the standard of discipline was that it was on the improvement for the last two years. This was because of good human approach, fair wage structure (from 1969) good grievence procedure, liberal fringe benefits extended by the management and lastly because of good and efficient internal leadership.

TABLE 4.14
OPINION ON DISCIPLINARY ACTION

	(In Percentage)			
	Skilled	Semiskilled	Unskilled	Overall
Liberal	17.82	20.00	30.55	20.49
Justifiable	55.03	47.50	44.44	51.71
Not so justifiable	14.72	20.00	5.55	14.15
Victimising	1.55	–	2.77	1.46
No opinion	10.88	12.50	16.69	12.19
	100.00	100.00	100.00	100.00

C. Grievances

Broadly the term ‘grievance’ means any discontent or dissatisfaction expressed or otherwise and whether valid or not arising out of anything with the company that an employee thinks, believes or even feels is unfair, unjust or inequitable.

In industrial relations and in fact in the whole gamut of human relations, grievances are bound to arise. If these grievances are not understood and redressed speedily, these tend to assume exaggerated proportion and disrupt harmonious relations. “The true significance of the grievance emerges only when we recognise the expression of dissatisfaction as a symptom of friction or malfunctioning somewhere in the living structure of shop relationships.”⁸ It is the responsibility of management to introduce a sound grievance machinery.

In the Shipyard, upto 1971, there was no written procedure to settle complaints and grievances. The workers on their own, sometimes, complained to the foreman and sometimes the complaint was taken up by the union. If the grievance was not solved at this level it was taken up with the higher authorities.

In 1972 a written procedure was set up by the Chairman and Managing Director when it was observed that workers and staff were experiencing difficulties in running from one depart-

8. Selekman Benjamin, M., *Labour Relations and Human Relations*, McGraw Hill Book Co, New York, 1947, p 110.

ment to the other. While this was not only an inconvenience to the workers and staff but it also resulted in loss of man hours interrupting flow of working in various departments. The following is the procedure set up for the redressal of grievances.

In the first instance, the workers/staff orally represent their grievances to the respective supervisor; assistant foreman or junior officer. Representatives of the Labour Welfare Officer visit the various departments between 2–30 and 4–00 p.m. every working day and between 10–30 a.m. and 12 noon on Saturdays and the grievances are brought to their notice. The representatives of the Labour Welfare Officer inform the Supervisor/Assistant foreman/Junior Officer of how the redressal was made and the action taken to redress the same, so that the workers/staff are intimated within 48 hours of their oral representation.

If the workers/staff still are not satisfied, the matter is referred to the concerned manager/the departmental head, who in consultation with the Labour Officer and Chief Personnel Officer, if necessary with the Financial Advisor and the Chief Accounts Officer, communicates in writing about the action taken on such written representations to the concerned workers/staff within three days of receipt of the same.

If the workers/staff still feel that their grievances are not satisfactorily redressed, such matters can be represented by the representatives of the Hindustan Shipyard Labour Union/Hindustan Shipyard Staff Association to the Director of Ship construction/Additional Director of Ship construction/Chief Engineer/Financial Advisor and Chairman and Managing Director, where they would be solved.

Thus this method aims at redressing grievances in a more sympathetic and speedy manner and helps in reducing loss of man hours and promotes harmony on the floor and in the department.

In order to know whose assistance the worker took when he had any grievance, information was collected from workers. It was learnt, in the first instance they approached mostly the supervisor or the Assistant Foreman or the Foreman directly and when their grievance was not satisfactorily redressed, they approached the Union. But in most cases it was noticed their grievance was redressed at the very first stage. However, there

were also cases where at the very first instance the union was approached.

D. Absenteeism

Absenteeism is a problem, that management cannot afford to ignore, as production and productivity of any concern largely depend on the amount of time the employees spend working on their jobs. High rate of absenteeism results in loss of production, increase of labour cost and lower operational efficiency. With industrialisation of the country and improved standards of medical care, better working conditions and higher income levels, it was not possible to bring down absenteeism rates. Compared to the incidence prevailing in U.S.A. and other western countries, the rates of absenteeism in Indian industries have been considerably higher.⁹ Many studies conducted in this field have concluded that high rate of absenteeism is mostly the consequence of many factors.¹⁰ As it has been rightly pointed out chronic absentee behaviour stemmed primarily from job frustration.¹¹

In the Hindustan Shipyard absenteeism is approximately 13% whereas the average rate of absenteeism for all industries in India works out at 14.6%.¹² The rate of absenteeism generally increases in the Shipyard from February due to Kotha Amavasya, goddess festival at Anakapalle (for which a number of workers go) and the Telugu New Year's day.¹³ During the months of May and June absenteeism is high due to the marriage season. Many workers also get their eligible leave, i.e.,

9. Durganand Sinha, "Psychological Researches," *Labour Research in India*, ed. by V.B. Singh, Popular Prakashan, Bombay, 1970, p. 150.

10. Lakshminarayana Rao, V., "Absenteeism in Industry," *Industrial Sociology*, Vol. II, No. 3, 1950.

11. Vaid, K.N., "Papers on Absenteeism," Asia Publishing House, Bombay, 1967, p. 66.

12. In some industries and regions the rate is much higher (for Bombay textiles and engineering, 22.2% and 18.2% respectively in 1968 ; for cement in Bihar 18.5% in December 1969 ; for plantations in Mysore 22.1% in 1968). Vaid, K.N., "Discussion and Communication on Containing Absenteeism", *Indian Journal of Industrial Relations*, July 1970, Vol. 6, No. 1, p. 69.

13. These festivals are considered to be popular festivals in this area.

casual leave and annual leave with wages by the 1st January every year. Many workers avail leave during the first half of the year. So the absenteeism is high from January to June. From July to December the absenteeism is on the lesser side.

Statistics relating to absenteeism in the Shipyard were collected from 1957 to 1971 from the Time Office for the workers. Generally the rate of absenteeism is defined as percentage of the total number of mandays lost due to absenteeism to the total number of mandays scheduled to work in a given period. Mandays lost due to strikes or lockouts are not included in absenteeism. Unauthorised absenteeism means absents from work without applying for leave or without getting application approved by the management. A certain amount of absenteeism is unavoidable. The Factories Act, 1948 makes provision for 'earned leave' which must be granted to workers when applied, unless there are strong reasons for refusal or postponement. The standing orders (or awards in many other cases) provide for casual leave. The Employees' State Insurance Act, 1948 provides for 56 days of such leave in a continuous period of 365 days. All these constitute potential authorised absenteeism. Further, there always exist situations when a worker stays away from work even if he does not get, or is unable to get leave under the above three categories.

The mandays lost due to absenteeism were shown in the office records under five categories, viz., accidents, sick leave, leave with pay, authorised leave and unauthorised leave. Data is collected departmentwise from these records for the years 1957 to 1971.

Table 4.15 gives overall absenteeism rates and percentage distribution of absenteeism according to types of leave from 1957 to 1971. The data for the years 1957 to 1961 include apprentices as it was not possible to separate them from other figures. As is seen from the table, the rate of absenteeism was on the increase, and it has gone up from 10.51 in 1957 to 14.47 in 1965 and thereafter it was fluctuating between 12 and 14. In this connection, the increasing trend of absenteeism in recent years in Indian industries pointed out by Durganand Sinha¹⁴ is to be kept in mind. A further look at the type of leave reveals

14. Durganand Sinha, loc. cit.

TABLE 4.15
OVERALL ABSENTEEISM RATES AND PERCENTAGE DISTRIBUTION OF ABSENTEEISM ACCORDING TO
TYPE OF LEAVE 1957 TO 1971

Year	Rates of Absenteeism	Accident rate rest	Sick Leave	Leave with pay	Autho- rised Leave	Unautho- rised Leave	Total Leave with pay	Total Leave on loss of pay
1957	10.51	2.05	35.83	30.92	9.00	22.20	68.80	31.20
1958	10.87	1.08	44.56	31.81	10.24	12.31	74.35	22.55
1959	10.73	1.38	44.74	36.38	8.24	9.26	82.50	17.50
1960	11.46	1.32	48.27	34.16	8.30	7.95	83.75	16.25
1961	11.27	1.15	47.51	32.36	10.06	8.92	81.02	18.98
1962	11.16	NA	NA	NA	NA	NA	NA	NA
1963	13.01	NA	NA	NA	NA	NA	NA	NA
1964	13.55	0.70	34.24	46.05	10.35	8.68	80.99	19.01
1965	14.47	0.68	32.64	45.10	11.76	9.82	78.42	21.58
1966	13.11	0.69	33.15	43.83	10.04	12.29	77.67	22.33
1967	14.02	0.64	35.51	43.31	9.28	11.26	79.46	20.54
1968	11.88*	0.81	34.56	48.20	6.03	10.40	83.57	16.43
1969	12.67	0.88	31.00	49.03	4.09	15.00	80.91	19.09
1970	12.86	0.64	29.78	48.28	4.67	16.63	78.70	21.30
1971	13.19	0.64	29.78	47.89	3.12	18.57	78.31	21.69

NA = Not Available.

*Absenteeism figures of graving dock not available.

that accident rest was on the decrease and it had declined from 2.05% in 1957 to 0.64% in 1971. This was because of decline in the frequency rate of accidents. Sick leave was also on the decrease and this was due to certain measures taken by the management like improved medical treatment both within and outside the yard. But leave with pay has increased from 30.92% in 1957 to 47.89% in 1971. This might be due to more employees availing authorised annual leave.

The rate of absenteeism has increased in all departments during the period under study. An insight into the type of leave by departments revealed that accidents were responsible to a considerable extent for an increase in the rate of absenteeism, in departments like welding, stores, hull-outfit. It was also noticed that unauthorised absenteeism in some departments like security was on the increase. Hence efforts have to be taken to reduce unauthorised absenteeism as it often expresses unspoken criticism of what employees regard as deficiencies in the employment situation.

The officers during the course of interviews were asked their impression regarding the absenteeism among workers in the Shipyard and possible methods of reducing it. Most of the officers were of the opinion that absenteeism was indeed high among the daily rated workers. The reasons being that major section of the labour force comes from rural areas, who still had their commitment to their villages. Secondly, factors like sickness, observation of social customs, festivals, marriages, funerals and lastly mere lethargy and laziness especially after the pay day were responsible to a large extent. It was pointed out by some officers only education could help them to understand the importance of being regular. Some officers said overtime reduced absenteeism to a large extent, but however pointed out that it was not the right method that could be adopted.

The problem of absenteeism often results in very serious consequences at the enterprise level. It results in production losses, increase of labour costs and reduces efficiency of operation. It forces enterprises to employ more hands than the jobs require which increases cost of labour. It was learnt that management was no doubt eager to reduce absenteeism and was

thinking of introducing some type of incentive for workers like attendance, bonus, etc. Some of the officers have pointed out this feature cannot be corrected in the short run, or till such time the workers completely became urbanised and left their contacts with their villages.

E. Accidents

Just as Science & Technology brought in its wake the realisation that there was no need to propitiate Gods with human sacrifices, it is now learnt that the modern machine and technology need not be provided with human sacrifices for their effective functioning. However, the total of human lives taken by industry is staggering. In the United States for instance during the last 10 years (1960–70) more Americans were killed on the work spot than in the Viet Nam War. Industrial accidents cost five times as many mandays as strikes.¹⁵ However, war and strikes make headlines and not industrial death and disability. In India a less industrialised country, it has been reported 700 persons die annually through industrial accidents. Of the 5 million factory workers 1.75 lakh or 3.5% are injured every year. Majority of them were involved in serious injuries.¹⁶

The main difficulty in exhorting workers to safety consciousness is that the only results ever visible are bad ones. Being safe is not usually something one can rush out and do. It takes serious accident to make men fully aware of the hazards around them. At present there is much concern for industrial safety. Accidents constitute an important index of any organisational health and they influence efficiency because accidents mean death or permanent or temporary disablement. They involve waste of economic resources, human energy and subsequent suffering of the workers and their departments.

Industrial accidents and the resulting injuries have become a regular feature of mechanisation of industry. But to some extent the factors responsible for accidents are controllable provided they are properly identified and proper measures are taken in time.

15. Mohan Das, S.R., "Industrial Accidents – Scope for Minimisation," *Financial Express*, 4th April, 1970, p. 2.

16. Ibid, p. 2.

The accidents that occur in the Shipyard are partly due to lack of suitable safety measures and partly due to the negligence of workers, resulting from miscalculation or wrong judgement, deliberate failure to take the necessary precautions, or ignorance of the risk involved, or over-work and fatigue. Some times accidents are a result of the accident proneness of certain workers. As for example, those who lack hand-eye coordination, are subject to more and frequent accidents. Such people are 'accident prone.' It has been rightly observed "plants should be properly designed, the tasks of men who will operate it should be properly analysed and they should be taught to operate correctly. Safety follows naturally and there are no unplanned stoppages and no injuries."¹⁷

The data on industrial injuries maintained in the Shipyard provides particulars for every injury regarding the date and time of occurrence, ticket number and dependents of the injured employee, a brief description of the cause, number of days absent together with the amount paid as compensation were available. This basic data was collected from 1957 to 1971 and was tabulated to facilitate a critical study of the injuries.

Table 4.16 and Fig. 1 give yearwise total number of workers on rolls, the frequency rate, the total number of mandays lost due to accidents and the severity rate of injuries from 1962 to 1971. The frequency rate is defined as the number of injuries per 1,000 mandays worked during a year. While calculating the frequency rate the injuries caused to skilled, semiskilled and unskilled workers only are taken into account. The estimated number of mandays actually worked and mandays lost due to injuries are determined on the basis of information available in the absenteeism records. Estimated number of mandays worked in a year is obtained by deducting the manshifts lost due to absenteeism from the mandays scheduled to work in the year. Frequency rate is a useful index in determining the extent of incidence of injuries. The table reveals that the number and the frequency rate were generally on the decrease. The injuries decreased from 172 in the year 1962 to 54 in the year 1970, i.e., by less than three times, so also the frequency rate has come

17. Stanhope White, "What Safety really means," *Management Today*, April 1970, p. 36.

down from 0.1632 to 0.0531 during the period. It is heartening to note that the Shipyard had won the National Safety Award

TABLE 4.16
ANALYSIS OF INJURIES

Year	Number of injuries*	Frequency rate	Number of mandays lost	Severity rate
1962	172	0.1632	1,115	1.0582
1963	121	0.1226	1,084	1.0987
1964	145	0.1357	1,208	1.1304
1965	147	0.1384	1,228	1.1560
1966	103	0.1069	1,071	1.1120
1967	132	0.1518	903	1.0386
1968	95	0.1095	929	1.0710
1969	84	0.0827	1,294	1.2739
1970	54	0.0531	934	0.9195
1971	68	0.0674	1,023	1.0136

*Includes only injuries sustained by skilled, semiskilled and unskilled workers.

during the years 1970 and 1971 for achieving the lowest frequency rate of accidents among the group comprising rail road equipment, shipbuilding and ship repairing organisations. The Shipyard has also been awarded the State Safety Award for the years 1970 and 1971, for achieving the maximum reduction in the frequency rate of accidents among the group of engineering industries. It may be noted here that the management had taken several steps in this direction; like appointment of safety engineer, display of safety literature in various places, imparting of safety education, and prompt investigation of accident cases, etc.

Table 4.16 shows the severity rate of injuries yearwise from 1962 to 1971. The rate is calculated by deviding the total number of mandays lost due to injuries by estimated number of mandays worked. The severity rate shows the degree of seriousness of injuries. In the analysis of injuries, severity rate is an important index, as it takes into account both mandays lost and exposed. It is seen from the table though the number of

injuries were generally on the decline, the mandays lost were fluctuating from year to year. This could be due to the more

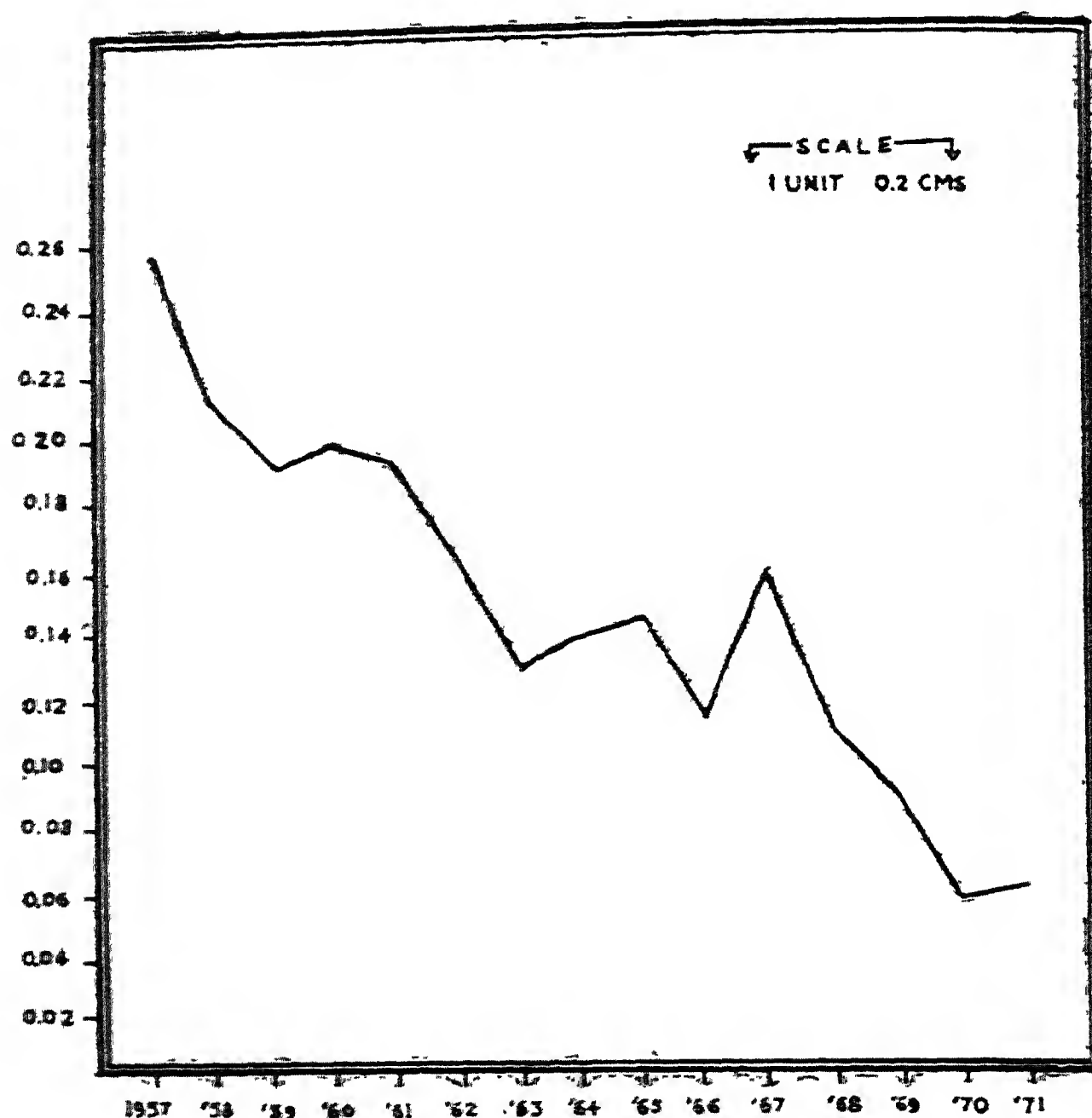


Fig. 4.1
Accidents Frequency Rate from 1957 to 1971

serious type of injuries, needing more injury rest. The number of mandays lost due to injuries was the highest in the year 1969, i.e., 1,294 mandays though the number of injuries were only 84, i.e., less than half of the number of injuries in 1962 (172). The manshifts lost due to injuries were the lowest in the year 1967 with 903. So also is the case with the severity rate, it was the highest in the year 1969 with 1.2739 and the lowest in the year 1970 with 0.9195.

Causewise number of injuries and percentage in total for the 15 years period from 1957 to 1971 are presented in Table 4.17. A study of the description available in the records of accidents helped in grouping them under the 12 categories of causes. The data presented in the table related to all injured irrespective of

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their categories (including staff supervisors and trainees) and however minor the injury was. So the total number of injuries represent both reportable and non-reportable causes. From the table it is clear that the number of injuries was on the decline. The injuries fell from 273 in 1957 to 61 in 1970 but however they increased to 78 in the following year 1971. The decline as already mentioned above was perhaps due to the various precautions that were taken by the management to put down the rate of accidents.

As we observed from Table 4.17, eye injuries due to the fall of foreign bodies like dust particles recorded the highest percentage (on an average 26%) in all the years except in 1961 and in the last four years. The decline in the number of eye injuries in the last four years can be attributed mainly to the increased use of safety gadgets. Formerly the management faced with the problem of the negligence of workers in using the safety equipment.

Next to the eye injuries, injuries caused as a result of being struck by an object due to fall or hit formed the highest percentage (on an average 24%). This type of injuries increased in the last five years. The data revealed that the parts of the body exposed to this type of injuries mainly were feet and hands. If some effort is made to guide and to provide some protection to feet and hands, there might be adequate chances of reducing injuries of this type.

Injuries due to jamming and crushing accounted for on an average 9%. Another important cause for a large number of injuries was found to be slipping which was responsible for 11% of injuries on an average. Further it could be observed from Table 4.17 that the percentage of injuries caused by slipping was increasing from year to year. While it was only 9.16% in 1957, it had gone up to 19.23% in 1971. Accidents due to fall was also found to be increasing: with 5.13% in 1957, they went upto 15.38% in 1971. Injuries due to nail or stone piercing formed about 3% on an average for the years 1957 to 1970. There was no injury on this account in 1971. This might be due to management taking steps to see that workers get habituated to some footwear. Burns due to hot plate, steam fire, etc., were also on the decline

as they decreased roughly from 6.74% in 1968 to 1.28% in 1971. Regarding injuries due to cuts, scratches, etc., there was again some improvement, since the rate of accidents fell from 8.77% in 1966 to 1.28% in 1971.

Unspecified and miscellaneous causes like sounds resulting in ear injuries, sprain due to pushing or pulling, dog bite, snake bite, inhalation of gas were responsible for another 12% of total injuries on an average. Such causes were the highest in the year 1959 (19.81%) and lowest in the year 1965 (5.49%).

Fatal injuries which resulted in death were two in 1957, one in 1958 : two in 1960 and one each in 1962, 1964, 1966 and 1968. In 1957 the rivetter fell to the ground from a height of 40 feet, when the chain broke at the hook while rivetting. The other fatal accident was in the stores department when a worker was knocked down while pulling out plywood sheets from a stock. In the subsequent years it was found that electric shock was to a large extent responsible for fatal accident.

Table 4.17 reveals that there were certain causes which could have been avoided by the employees with little more safety mindedness. Investigation of accidents should be made by the management to locate the causes and to take appropriate action for the prevention of accidents. They should try to know whether many of the injuries were the result of the faulty environment like hazardous arrangement, unsafe machinery and equipment, illumination, ventilation or moving machines or as an result of the human element – like physical and mental characteristics, ignorance or use of incorrect methods, faulty work habits, insufficient experience, or as a result of the attitudes – like indifference in attention, arrogance, recklessness, hostility, etc. However, it is evident from the table that injuries resulting from three causes, viz, 'struck by an object due to fall or hit,' 'accidents due to fall' and 'slipping' were found to have increased under the period of study. But these injuries cannot be reduced much by management, because their occurrence is associated with the negligence on the part of the workers while on duty. Thus a majority of accidents were said to be due to 'human failings.'

Careful working on the part of workers can only prevent such accidents. What management can do is only to entrust the supervisor with the responsibility of training the workmen and explaining before hand the difficulties involved in carrying on a particular job and the type of accidents that are likely to occur.

Categorywise number of employees involved in accidents has been analysed in Table 4.18. The categorisation was done based on designations. It is seen from the table that injuries to the supervisory and other staff category are very negligible when compared to the skilled, semiskilled and unskilled categories. The maximum number of injuries in the supervisory category was six forming 2.65% of all injuries in the year 1958. In the years 1962, 1966 and 1967 there were no injuries and in the other years the injuries ranged between one and five in number. In the staff category also the injuries ranged between one and seven in number. The reason for the limited number of injuries in the category of supervisors and other staff when compared to others is because of their not coming directly in contact with work as in the case of skilled, semiskilled and unskilled workers. In the years 1957 and 1958 as is seen from the table, the number and percentage of injuries were the highest in the semiskilled category. In the later years the maximum number and percentage were among the skilled category with the exception of 1960. This is because the skilled workers were more involved in technical jobs than those of semiskilled and unskilled workers. It is observed that there was a decline in injuries among the trainees and there was only one injury in the year 1970 and three in the year 1971, compared to 24 in the year 1957.

An attempt is also made to study accidents department-wise and analyse which departments are more involved in accidents. It is observed that in some departments like Hull-shop, Prefabrication, Welding, Erection, Ship outfit, the incidence of injuries was generally high. But here one should keep in view the existence of a large number of employees in each department and the accident proneness of the jobs that are carried on in the respective departments. The high rate of accidents in the Ship outfit department refers to the slipping

TABLE 4.18
DISTRIBUTION OF INJURIES – CATEGORYWISE

Year	Super- visory		Other staff		Skilled		Semi- skilled		Un- skilled		Trainees		Total	
	N	P	N	P	N	P	N	P	N	P	N	P	N	P
1957	3	1.10	1	0.37	75	27.47	99	36.27	71	26.00	24	8.79	273	100.00
1958	6	2.65	4	1.77	64	28.32	76	33.63	60	26.55	16	7.08	226	100.00
1959	2	0.99	2	0.99	73	36.32	62	30.85	46	22.89	16	7.96	201	100.00
1960	5	2.25	4	1.80	69	31.08	51	22.98	73	32.88	20	9.01	222	100.00
1961	5	2.28	6	2.74	75	34.26	52	23.74	52	23.74	29	13.24	219	100.00
1962	—	—	4	2.00	65	32.50	49	24.50	58	29.00	24	12.00	200	100.00
1963	3	2.05	2	1.37	53	36.31	31	21.23	37	25.34	20	12.70	146	100.00
1964	1	0.60	2	1.20	72	43.10	44	26.35	29	17.37	19	11.38	167	100.00
1965	3	1.83	4	2.44	70	42.68	33	20.12	44	26.83	10	6.10	164	100.00
1966	—	—	5	4.39	55	48.25	24	21.05	24	21.05	6	5.26	114	100.00
1967	—	—	7	4.86	76	52.78	22	15.28	34	23.61	5	3.47	144	100.00
1968	3	2.89	4	3.85	58	55.77	15	14.42	22	21.15	2	1.92	104	100.00
1969	3	3.26	2	2.17	54	58.70	10	10.87	20	21.74	3	3.26	92	100.00
1970	3*	4.92	3	4.92	32	52.46	8	13.11	14	22.95	1	1.64	61	100.00
1971	5†	6.41	2	2.56	36	46.14	8	10.26	24	30.78	3	3.85	78	100.00

N = Number of Injuries; P = Percentage in Total.

* Includes one officer

† Includes two officers.

of the workers while working at a height on the wooden planks. There are many cases of slipping or loosing balance or the plank giving way and the person falling from that height. Hence, it is necessary that management take some precaution to reduce this type of accidents.

An important effect of accidents is the loss of mandays. Table 4.19 gives cause-wise percentage distribution of injury rest granted. The main cause calling for more injury rest being struck by an object, due to fall or hit, injuries due to jamming or crushing, accidents due to slipping and falling. This does not however mean that such injuries were more severe but they were large in number. This emphasizes the need for controlling these types of accidents for minimising the loss of mandays.

Table 4.20 shows the period of average rest (in days) granted per injury under each cause. Average rest for each injury is obtained by dividing the total rest in days, for that particular cause by the total number of injuries coming under the cause. Though in the years 1968, 1969, 1970 and 1971, the number of injuries had decreased, the overall average rest was on the increase and this might be because of the more severe type of injuries in these years.

For almost all the cases of accidents that were reported, injury rest was granted. Injuries for which rest was granted for above 21 days are usually considered as serious. Injuries for which rest was granted not exceeding two days are treated as minor injuries. It is seen that though the accidents in general decreased in the years 1970 and 1971, the accidents of more serious type were on the increase. It is further observed that the accident rest was on the increase in 1970 and 1971 when compared to the earlier years. It may be remembered prompt treatment of accidents promises to shorten recovery time and reduce the frequency of permanent disability and also management's financial liability.

Table 4.21 gives the number of compensated injuries and the amount paid by the management under the Workmen's Compensation Act and the exgratia for the period from 1957 to 1971. None of the years witnessed any permanent total disablement. Cases of permanent partial disablement were the

TABLE 4.21
NUMBER OF COMPENSATED INJURIES AND AMOUNT OF COMPENSATION PAID UNDER WORKMEN'S
COMPENSATION ACT AND EXGRATIA - 1957 TO 1971

Year	Number of Injuries for Which Compensation Was Paid			Amount of Compensation Paid Under Workmen's Compensation Act									
	Workmen's Compensation Act			Workmen's Compensation Act				Total					
	Death	PTD	PPD	TD	Exgratia	Death	PTD		PPD	TD	Exgratia		
							Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1957	2	-	7	41	264	273	6,500	-	6,146	1,592	1,492	15,730	
1958	1	-	-	33	225	226	3,000	-	-	699	1,361	5,060	
1959	-	-	3	59	187	201	-	-	1,277	1,712	833	3,822	
1960	2	-	6	98	211	222	6,500	-	2,866	1,566	977	11,909	
1961	-	-	1	106	197	219	-	-	126	2,895	886	3,907	
1962	1	-	2	87	190	200	3,500	-	1,085	1,322	842	6,749	
1963	-	-	2	62	138	146	-	-	4,510	2,320	849	7,679	
1964	1	-	5	73	151	167	8,000	-	12,348	3,211	833	24,392	
1965	-	-	3	66	157	164	-	-	3,458	1,099	985	5,542	
1966	1	-	7	48	102	114	7,000	-	8,771	1,144	671	17,586	
1967	-	-	4	73	135	144	-	-	6,300	1,974	1,038	9,312	
1968	1	-	4	58	91	104	7,000	-	6,174	4,937	819	18,930	
1969	-	-	5	48	82	92	-	-	6,254	1,831	690	8,775	
1970	-	-	11	30	45	61	-	-	13,507	1,361	564	15,432	
1971	-	-	5	41	60	78	-	-	3,822	3,087	667	7,576	

PTD = Permanent Total Disablement; PPD = Permanent Partial Disablement; TD = Temporary
Disablement.

PTD = Permanent Total Disablement; PPD = Permanent Partial Disablement; TD = Temporary Disablement.

highest in the year 1970, numbering to eleven. However, cases of temporary disablement varied from year to year.

The actual amount of compensation paid in respect of the different categories of injuries during the period 1957 to 1971 is shown in Table 4.21.

Free medical treatment is given to all employees who come within the purview of the act. Further, cost of medicines and hospital charges are reimbursed in full to the injured employees. Arrangements are made for admission and treatment of injured employees in the Government hospitals and the hospital bills are paid. Over and above the compensation and medical charges payable under the statute, exgratia compensation is also paid for three days' waiting period.¹⁸ Compensation is, however, Payable for the temporary disablement from the first day of disablement in cases where the rest period exceeds 27 days. Full wages are paid for the day of the accident. The cost of ambulance service for evacuating the injured persons to the hospitals is borne by the Shipyard. In case of permanent partial disablement fee Payable to the Civil Surgeon of Government Hospital for assessment of loss of earning capacity and issue of final medical certificate is met by the Shipyard.

Persons sustaining permanent partial disablement are taken back to duty after being tested by the Departmental heads and the Medical Officer with a proportionate cut in their emoluments provided they are found fit for duty. Such workers are tested once in every six months and the cut in the emoluments is revised or restored as the case may be on the recommendation of the above committee. It is to be noted here that this Practice is being followed in pursuance of the conciliation proceedings of 1954 even though it is not obligatory under the Act to do so. Further, although in law, the employer is not liable to pay compensation for the waiting period the management is good enough to concede payment of compensation for that period as an exgratia measure.

Apart from payment of compensation for the accident period, the staff members coming within the purview of the

18. Waiting period means 'period of three days in respect of which the employers shall not be liable to pay compensation for employment injuries.'

statute are also allowed to adjust their absence against leave standing to their credit so as to enable them to draw their full pay. This practice may be extended to daily rated workers also.

The amount of compensation is not commensurate with the actual wage an employee draws, had he not sustained the injury and gone on enforced absence. In view of the normal expectation of a longer life and the higher costs of living, the lump sum compensation for disablement and death calls for upward revision. Half monthly compensation also has to be raised since there is no provision for medical leave on full pay.

F. Suggestion System

Suggestion system as a management tool has a firmly established place in business, industry and Government. Collection of information from all the individuals in the organisation as to their innovative ideas on every aspect of the business is in the best interests of the employee, the organisation and the public.¹⁹ Introduction of suggestion system now-a-days has become a common feature in many production establishments. The objectives of management in installing a suggestion system vary widely from “primarily tangible,” e.g., cost reduction to “leading to administrative techniques,” e.g., incentives for employee thinking²⁰.

The management of the Shipyard has recognised the concept that a worker who does the same job, operating or supervising, in course of time, will naturally entertain ideas as to the improvement which will lead to better production with less human effort. Accordingly, a suggestion committee²¹ was constituted with the aim of receiving and examining suggestions made by employees so as to improve the methods of production and to simplify the manufacturing process.

19. Krewatch William V., *Suggestion Systems, Handbook of Business Administration*, McGraw Hill Book Co., New York, 1967, pp. 11-97.

20. *Objectives of a Suggestion System*, National Association of suggestion systems, Chicago, 1958, p. 29.

21. The suggestion committee was constituted in February 1954. It consists of eight members and non-member secretary. The eight members are three officers nominated by the management, two staff members nominated by the staff association and three workmen nominated by the labour union. The non-member secretary is a technical person nominated by the management. The term of office is two years.

The suggestions are sent in the name of the Secretary. Two suggestion boxes are installed at important centres in the area of the Shipyard one at the main gate and the other at the telephone exchange. Any suggestion expressed in the medium of Telugu or English can be deposited in the suggestion box. There is no restriction as to the number of suggestions emanating from an individual employee and he need not submit the same through the department.

The committee's responsibility is to examine the suggestions made and to make a practical demonstration of its feasibility on referring them to the concerned departments for comment and opinion as to the benefits that may accrue by implementing the suggestion. Then the committee recommends to the Managing Director, the suggestions which are good and can be rewarded. Secrecy is maintained as regards the name to enable the workers and staff to express themselves freely.

Cash rewards range from Rs. 25 to Rs. 400 depending upon the degree of merit and originality shown in the suggestion. Circulars are sent by the Managing Director to all the departments announcing the names of those who are rewarded and they are distributed to the respective candidates at the time of ship launching. Table 4.22 gives in detail the number of suggestions that were rewarded and the extent to which the reward was made. It is seen from the table that during the last 10 years that the suggestions rewarded were only from workers. All suggestions may not be accepted and rewarded. Therefore suggestions are further classified in order to get an idea as to the number of suggestions made, and number of suggestions rewarded. Table 4.23 shows that a large number of suggestions were received in the years 1957, 1961 and 1968. In other years, they were on the decline. The reason for declining number of suggestions from year to year could be that though in the years 1969 and 1970 some suggestions were made no award was given and this might have acted as a disincentive factor. Another reason, as can be seen from Table 4.22 might be that though an award was announced in 1968, it was not given till the date of the enquiry (1972). The management will have to keep in mind the adverse effects of this trend and take appropriate steps to rectify the situation.

TABLE 4.22

DETAILS OF THE SUGGESTIONS REWARDED – 1957 TO 1971

Date of Suggestion made	Date of the reward	Suggestion made by	Amount of reward
20-3-1957	29-7-1957	Worker	25
2-3-1957	29-7-1957	Staff	60
18-3-1957	29-7-1957	Worker	75
21-10-1957	5-7-1958	Staff	100
1- -1960*	6-9-1960	Worker	50
19-1-1961	25-9-1961	Worker	100
2-6-1961	6-4-1962	Worker	100
9-10-1961	1-5-1962	Staff	50
9-12-1961	17-8-1962	Worker	50
18-12-1961	17-8-1962	Staff	100
NA	17-8-1962	Worker	100
NA	15-8-1963	Worker	100
NA	5-12-1964	Worker	25
23-2-1968	15-4-1968	Worker	100
4-3-1968	15-4-1968	Worker	150
4-3-1968	15-4-1968	Worker	200
1969¶	—	—	—
1970¶	—	—	—
1971¶	—	—	—

NA = Not Available

* Month in the year 1960 is not available

¶ Suggestions were made in the year 1969, 1970 and 1971 but till the date of collection, the data, the persons rewarded were not announced.

G. Productive Efficiency

The concept of 'productive efficiency' refers to better utilisation of the firm's resources in terms of manpower, material and machinery. Productivity is a challenge to the management based on whose skill and honesty, the future 'progress' of the firm depends. Increased productivity of labour, superior machines, superior organisation, faster and more effective methods of getting jobs done²² – all contribute to the increase

22. Lokanathan, P.S., "Labour Productivity," *Labour Research in India*, Ed. V.B. Singh, Popular Prakasan, Bombay, 1970, p. 104.

TABLE 4.23

NUMBER OF SUGGESTIONS MADE AND REWARDED – 1957 TO 1971

Year	Total Number of suggestions	No. of suggestions rewarded	% of sugges- tions rewarded
1957	45	4	8.89
1958	23	–	–
1959	14	–	–
1960	12	1	8.33
1961	30	5	16.67
1962	1	1	100
1963	1	1	100
1964	1	1	100
1965	NA	NA	NA
1966	NA	NA	NA
1967	5	Nil	Nil
1968	31	3	9.67
1969	8	Nil	Nil
1970	3	Nil	Nil
1971	Nil	Nil	Nil

NA = Not Available

of overall productivity of an enterprise. The result is qualitative product at reduced cost.

India is passing through a very critical period. Unless productivity is improved, the very survival will be at stake. In this connection we better emulate Japan and Germany who have made spectacular progress only through a high rate of productivity. Productivity is practically a synonym for progress. For India it means not merely progress but survival.

Systematic studies for the measurement of productivity in Indian industries face many limitations because of the absence of proper and adequate records of the cost-benefit-analysis in respect of each factor of production. However, an attempt is made to study the productivity in the Shipyard based on certain factors which have a direct bearing on productive efficiency.

The capacity of the Shipyard is reckoned at three ships of 38,000 to 40,000 DWT per annum with existing facilities and techniques. In fact it is opined by Management By Objectives

(MBO) team that it is possible to raise this to even four ships with better supervision, better utilisation of the existing machinery, simplification of methods and a marginal increase in the per capita productivity of labour.²³ Details of ships built from the inception of the Shipyard ; from 1946 to 1971 are shown in Table 4.24. The actual production for the last ten years (1961-71) calculated from the above table is given below :

Year	Number of ships launched	Number of ships delivered
1961-62	3	3
1962-63	3	2
1963-64	1	2
1964-65	2	2
1965-66	2	3
1966-67	2	2
1967-68	2	3
1968-69	2	3
1969-70	1	2
1970-71	2	2

The average actual production during the period 1961-62 to 1970-71 works out to 2.4 ships which is less than its capacity.

Table 4.24 shows shipwise tonnage, dates of keel laying, launching and delivery and time taken for completion of different stages of construction. As seen from the table there was no uniformity in the time taken for the construction of ships of the same size. Time taken from the date of laying keel to the date of launching varied from 6 months to 43 months. Similarly the time taken from the date of launching to the date of

23. The MBO team consisting of consultants from the Administrative Staff College of India, Hyderabad, was appointed in October 1972 to study certain issues like capacity, performance, profitability of the Shipyard, and long-range planning of the development of the Yard.

The MBO team after analysing the sequence of events, viz., delivery, keel-laying and launching during the period 1967-71 and dates of vacancy and occupation of berths during the period of 1964-69 has come to the conclusion that the launching of a ship every four months and delivery of a vessel every four months is certainly within the capacity of the Shipyard with the existing equipment and manpower.

TABLE 4.24
SHIPS BUILT FROM 1946 TO 1971

Name of the Ship	DWT	Date of laying keel	Date of launching	Time taken from date of laying of keel to date of launching (in months)	Date of delivery	Time taken from date of launching to date of delivery (in months)	Time taken from date of laying of keel to date of delivery (in months)
Jala Usha	8,000	22-6-1946	14-3-1948	21	26-10-1948	7	28
Jala Prabha	8,000	22-8-1946	20-11-1948	27	7-4-1949	5	32
Kutub Tari	245	23-5-1947	18-12-1948	19	19-5-1949	5	24
Jala Prakash	8,000	27-5-1948	8-8-1949	15	20-12-1949	4	19
Jala Pankhi	8,000	7-1-1949	6-12-1949	11	4-4-1950	4	15
Jala Padma	8,000	26-1-1950	14-9-1950	8	18-1-1951	4	12
Jala Palaka	8,000	26-1-1950	27-12-1950	11	3-4-1951	3	14
Bharat Mitra	8,000	28-9-1950	26-3-1951	6	2-7-1951	3	9
Jagrani	8,000	9-5-1951	15-12-1951	7	9-6-1952	6	13
Jala Pratap	8,000	9-5-1951	27-2-1952	10	9-8-1952	5	15
Jala Pushpa	8,000	26-12-1951	9-7-1952	6	17-10-1952	3	9
Bharat Ratna	8,000	21-7-1952	26-8-1953	13	15-7-1954	11	24
Jala Putra	8,000	21-7-1952	9-11-1953	16	19-8-1954	9	25
Jala Vihar	7,000	1-8-1953	16-8-1954	13	22-6-1955	10	23

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Jala Vijaya	7,000	30-9-1953	26-3-1955	18	29-12-1955	9	27
Vidyut	Motor Launch	19-10-1953	18-8-1954	10	18-3-1958	43	53
Jala Vishnu	7,000	16-12-1953	2-11-1955	23	23-5-1956	7	30
State of Kutch	8,000	2-9-1954	29-3-1956	19	25-11-1956	8	27
Adyar	242*	27-9-1954	31-12-1955	15	25-9-1957	21	36
Andamans	4,000	10-8-1955	25-7-1956	12	4-12-1957	16	28
State of Orissa	8,000	8-12-1955	16-2-1957	14	31-12-1957	10	24
Jala Vikram	7,000	16-4-1956	29-7-1957	15	26-3-1958	8	23
Jala Veera	7,000	4-8-1956	22-11-1957	16	26-7-1958	8	24
Jagmitra	6,000	31-8-1967	5-7-1958	10	10-6-1959	11	21
Dhruvak	500	27-1-1956	16-7-1958	30	16-11-1959	16	46
Indian Industry	6,000	7-12-1957	12-12-1958	12	27-10-1959	10	22
Jayalakshmi	5,000	22-8-1957	22-4-1959	20	27-1-1960	9	29
State of Uttar Pradesh	9,500	3-10-1958	31-12-1959	15	16-1-1961	13	28
R.S.V. Haldia	360	16-11-1956	11-6-1960	43	25-3-1961	9	52
State of Rajasthan	9,500	22-1-1959	29-4-1960	15	18-5-1961	13	28
Vishva Nidhi	9,500	11-5-1959	6-9-1960	16	2-10-1961	13	29
State of Punjab	12,300	2-12-1959	16-4-1961	16	6-4-1962	12	28
Vishva Shanti	12,300	29-1-1960	25-9-1961	20	14-9-1962	12	32
Vishva Prem	12,300	27-8-1960	20-12-1961	16	28-1-1963	13	29
Vishva Maya	12,300	22-9-1960	6-4-1962	18	30-4-1963	13	31
Vishva Mangal	12,300	5-5-1961	17-8-1962	15	23-9-1963	13	28

Jala Kala	12,709	12-10-1961	29-3-1963	18	12-11-1954	20	38
Darshak	611	14-10-1957	2-11-1959	25	28-12-1964	62	87
State of Madhya Pradesh	12,669	8-1-1962	15-10-1963	21	4-5-1965	19	40
Jala Kendra	12,743	24-5-1962	16-4-1964	23	29-1-1966	21	44
State of West Bengal	12,915	6-9-1962	5-12-1964	27	31-3-1966	16	43
Jala Kanta	12,912	26-4-1963	1-7-1965	26	2-8-1966	13	39
State of Mysore	12,923	13-11-1963	9-12-1965	25	11-10-1966	10	35
Vishva Tej	12,682	4-5-1964	1-10-1966	29	2-10-1967	12	41
Vishva Tirth	12,682	8-1-1965	28-12-1966	24	3-12-1967	11	35
Vishva Seva	12,959	23-8-1965	26-4-1967	20	2-3-1968	10	30
Vishva Siddhi	12,972	24-12-1965	15-11-1967	23	12-9-1968	10	33
Vishva Bhakti	12,733	23-1-1967	15-4-1968	15	29-1-1969	9	24
Vishva Shobha	12,931	13-2-1967	24-9-1968	19	11-5-1969	8	27
Vishva Shakti	12,900	19-5-1967	20-3-1969	22	17-12-1969	9	31
Vishva Dharma	12,852	22-11-1967	8-10-1969	23	20-4-1970	6	29
Vishva Vikram	12,881	6-6-1968	9-2-1970	20	12-9-1970	7	27
Vishva Darshan	12,883	16-12-1968	20-7-1970	19	2-7-1971	12	31
Vishva Nayak	12,881	26-6-1969	30-11-1970	17	22-10-1971	11	28

*Kort Nozzle Tug - 242 Grt.

Source : Compiled from 19th Annual Report of the Hindusthan Shipyard Ltd., Visakhapatnam, 1970-71.

delivery varied from 3 to 50 months. However, two ships of 8,000 DWT were completed in nine months each.

The average time taken for completion of the construction of ships (from the date of keel laying to the date of delivery) delivered during the period under study (1957–71) has been calculated by splitting up the entire period into three groups, viz., 1957–61, 1962–66 and 1967–71.²⁴ It has been found the average time taken for completion of the construction of a ship has increased from 25.55 months during the period 1957–61 to 34.55 months 1962–66. It is heartening to note that this average time during the period 1967–71 has come down to 30.55 months. But the construction period in recent years (1972–74) has slightly increased to 33 months. This may be compared with the Japanese Shipyards where it is found that the period of construction of a medium size ocean-going vessels is less than eight months.

With the help of the information given in Table 4.24 an attempt has been made to classify the ships built from 1962 to 1971 according to their tonnage in Table 4.25. As is found from this table not much of any relationship between tonnage and time taken for completion of different stages could be observed. Further as the data is analysed it is found that there is also no evidence as to the reduction in time taken for ship construction.

Table 4.26 shows yearwise total DWT and per worker DWT produced during the period 1957–71.²⁵ It is observed from this table that the total DWT of ships constructed during the period 1957 to 1971 was mostly fluctuating from year to year. The lowest tonnage (5,405) was in 1960 and the highest (51,697) was in 1966. The tonnage was around 26,000 from 1967 onwards with the exception of 1969 in which it had crossed 38,000. The intensity of fluctuations found in respect of total DWT is also found in per worker DWT. The years 1960 and 1966 recorded the lowest and highest per worker DWT with

24. While calculating the average time taken, four small vessels have been excluded, since they cannot be considered as ocean-going vessels.

25. DWT of one launch each in 1965 and 1970 and DWT of landing craft in 1971 are not available. Further, it may be noted here, in calculating per worker DWT, only skilled, semiskilled and unskilled workers—who actually take part in ship construction—are taken into account.

TABLE 4.25

CLASSIFICATION OF SHIPS BUILT FROM 1946 TO 1971
(Time taken for each construction stage)

Group - according to weight	Number	Average time taken from the date of laying keel to date of launching (in months)	Average time taken from the date of launching to date of delivery (in months)	Average time taken from the date of laying keel to date of delivery (in months)
12,972 DWT to 12,750	11	21	10	31
12,750 to 12,650 DWT	6	21	15	36
12,300 DWT	5	17	13	30
9,500 „	3	15	13	28
8,000 „	14	13	6	19
7,000 „	5	17	8	25
6,000 „	2	11	11	22
5,000 „	1	20	7	27
4,000 „	1	12	16	28
500 GRT	1	30	20	50
613 DWT	1	25	50	75
360 „	1	43	9	52
245 „	1	19	5	24
242 GRT	1	15	21	36
Motor launch	1	10	43	53

1.38 and 12.39 respectively. During the last five years (1964–71) it was around six DWT with the exception of 1969, in which it was 9.86. The frequent fluctuations in per worker DWT during the period under study could be due to many factors which have been dealt within the next few pages.

Yearwise value of ship construction and total production (consisting of ship construction, ship repair and capital and other items) during the period 1956–57 to 1970–71 have been shown in Table 4.27 along with their per worker figures. The

TABLE 4.26

TOTAL DWT AND PER WORKER DWT OF SHIPS CONSTRUCTED –
1957 TO 1971

Year	Number of Workers	Total* DWT	Per worker DWT
1957	3,768	10,880	2.89
1958	3,805	14,624	3.84
1959	3,821	13,310	3.48
1960	3,903	5,405	1.38
1961	4,127	29,302	7.10
1962	4,118	25,183	6.12
1963	4,218	25,142	5.96
1964	4,189	13,524	3.23
1965	4,209	12,873	3.06
1966	4,171	51,697	12.39
1967	4,414	25,772	5.86
1968	4,029	25,831	6.41
1969	3,930	38,768	9.86
1970	3,838	25,733	6.70
1971	3,901	25,764	6.60

DWT = Dead Weight Tonnes

*Excludes two launches and one land craft.

value of ship construction work was increasing consistently from 290.93 lakhs in 1956–57 to Rs. 818.50 lakhs in 1970–71, with the exception of 1958–59, 1961–62, 1963–64, 1964–65, 1966–67 and 1969–70. The decline in 1969–70 was mainly due to the strike during the year leading to a loss of 82,090 man-days. Further the decrease in the value of ship construction during 1963–64 and 1964–65 compared to 1962–63 is said to be due to the unsatisfactory flow of materials during the period. The increase in the value of ship construction work in the year 1965–66 from that of 1964–65 was partly on account of additional payment made towards company's contribution to provident fund and liberal retirement benefits introduced during the year and partly on account of an overall increase in the quantum of production resulting from the completion of three ships during the year as against the two ships in the previous year.

TABLE 4.27

TOTAL VALUE OF SHIP CONSTRUCTION AND TOTAL VALUE OF PRODUCTION – YEARWISE

Year	Total value of Ship con- struction (Rs. in lakhs)	Value of per worker Ship construction Rs.	Total value of produc- tion (Rs. in lakhs)	Value of per worker production Rs.
1956–57	290.93	8,363	298.04	8,567
1957–58	333.91	8,458	343.31	8,696
1958–59	333.73	8,501	345.36	8,797
1959–60	389.62	10,128	401.48	10,436
1960–61	456.33	11,428	465.80	11,665
1961–62	448.67	10,837	461.43	11,146
1962–63	483.68	11,613	498.22	11,962
1963–64	459.78	10,960	475.05	11,324
1964–65	417.52	9,946	429.89	10,240
1965–66	524.90	12,483	540.17	12,846
1966–67	466.40	11,190	491.01	11,780
1967–68	661.94	16,078	681.42	16,551
1968–69	684.95	17,102	714.88	17,850
1969–70	677.35	17,435	699.00	17,992
1970–71	818.50	21,144	851.20	21,989

Since 1967–68 the value of ship construction work was on the increase, largely because of the steep rise in the cost of raw materials. The per worker value of ship construction was also increasing continuously from Rs. 8,363 in 1956–57 to Rs. 21,144 in 1970–71—nearly an increase of three times. The value of total production (consisting of the three items mentioned above) had gone up from Rs. 298.04 lakhs in 1956–57 to Rs. 851.20 lakhs by 1970–71. This three fold increase in the value of total production could be observed to some extent even in the case of per worker value of total production. But the increase in perworker figures in both the cases (value of ship construction and vaule of total production) was not to the same extent as the increase in the aggregate figures, reflecting thereby an increase in the total number of workers. However, from the above analysis it is clear that the increase in per worker value of ship construction and per worker value of total production, cannot

solely be attributed to the increase in the efficiency of the workers, as the price of raw materials like steel and machinery have gone up abnormally especially during 1970–71, and at the same time the wages have also recorded an increase.

A Japanese Technical Mission from Mitsubishi Shipyard of Japan which visited the Hindustan Shipyard in April 1973, submitted a brief report on the productivity of the Hindustan Shipyard. They compared the capacity and productivity of the Hindustan Shipyard with those of their country and presented the following statement.²⁶ The above table shows what could

		With facilities obtaining in 1963	
		With existing techniques and efficiency	With Japanese techniques and efficiency
Number of Ships per	year	12,300 DWT \times 3	12,300 DWT \times 10
DWT per year		37,000 DWT	123,000 DWT
GRT per year		28,500 GT	95,000 GT
Tonnage of Steel Fabricated	Yearly	9,900 T	33,000 T
	Monthly	820 T	2,750 T
	Daily	33 T	110 T
Construction period	On berth	14 months	3.5 months
	Outfitting	12 months	2.5 months
	On berth +		
	Outfitting	26 months	6.0 months

have been achieved by the Hindustan Shipyard with Japanese techniques and efficiency—the physical facilities remaining the same. This indicates unmistakably the abnormally low level of productive efficiency of the Hindustan Shipyard. It was observed by the Bureau of Public Enterprises²⁷ that a ship of ‘Mitsubishi’ type of 12,500 DWT took nearly 3.65 lakhs mandays for construction in the Shipyard. This worked out to about 29

26. Quoted in the report of the Management by Objectives Committee, op. cit.

27. A study of the performance of the Hindustan Shipyard Limited was undertaken in October 1969 by the Bureau of Public Enterprises, New Delhi, in association with the Ministry of Shipping and Transport—Report of the Bureau of Public Enterprises, Section III – Financial Aspects, p.19.

mandays per DWT or 232 man hours per DWT. For a similar type of ship in Japanese yard, the man hours required are about 17 as against 232 in our country. It may not be appropriate to compare the standards of productivity of the Hindustan Shipyard with that of Japanese Shipyard. Still the difference is so much that a comparison could help in initiating a suitable action so as to step up productivity and in reducing mandays required per DWT.

As rightly pointed out by the Managing by objectives team and the Bureau of Public Enterprises, the low level of productive efficiency can be attributed to the certain constraints faced by the Shipyard in its construction programme.

One of the major constraints which stood in the way of accelerating construction work is the unsound flow of materials. Procurement of quality raw materials and other items in time from indigenous suppliers has become a recurring problem. Another factor is the non-availability of high quality indigenous steel which is the principal raw material in shipbuilding industry. Importing steel or other materials consume lot of time and there is always the uncertainty in the release of foreign exchange. It has been suggested that it would be desirable if the Director General of Technical Development (DGTD) continuously reviews the indigenous capacity, and agrees for import of the rest of the materials in time in order to enable the Shipyard to keep to the production schedule.

Being an assembly industry the success of shipbuilding depends largely on the supporting services of ancillary industries catering to its needs. A steadily deteriorating situation of availability of foreign exchange makes local production all the more necessary. Unfortunately, however, this basic infrastructure has not developed so far. Hence ancillary industries have to be developed at a quicker and faster rate, and the indigenous materials be made available on a continuous basis and at reasonable cost.

Outmoded machinery and equipment in some of the departments is another factor inhibiting production in the Hindustan Shipyard. Working methods in the yard are more traditional and have not been modernised. Another constraint is the lack of adequate coordination between planning and execution of

production activities. For setting up standard working methods, a team of competent technical personnel may be entrusted with reviewing the work in the yard and standardise the methods from time to time. The involvement of managers and foremen activity during the stages of planning and scheduling of work, could to a large extent co-ordinate planning and production in the Hindustan Shipyard.

The key to productivity lies in assimilating and applying modern techniques and management practices to advantage. Towards this end, the establishment of systematic channels of communication has assumed significant importance. The Shipyard needs to establish better communication on a continuous basis as observed by MBO team to get effective results.

Another important factor having a negative effect on productivity is the absence of 'technical audit' in ship construction. The MBO team recorded that this aspect was brought to their notice by none else than the workers of the yard and staff themselves. In the absence of precise estimates of each item, more often the 'actuals' are taken for granted without ascertaining the variance from the estimates. At this juncture when the Shipyard is endeavouring to increase production to the maximum extent possible the importance of a system of performance measurement and evaluation integrated with the production budgets and schedules, needs no emphasis.

Another important constraint has been low productivity of labour. According to a survey carried out by the Institute of Work Study, Mussorie.²⁸ In July 1965, the man power utilisation in the Shipyard was reckoned at about 38.6%. In July 1966, Messrs Daya Shankar and Associate²⁹ basing on a random activity sampling, estimated that the average productive effort of labour was 33%. The position is more or less the same at present as the production has not increased. It may be noted

28. The Institute of Work Study, Mussorie carried out a survey in the Hindustan Shipyard in July 1965, according to which the man power utilisation was reckoned at about 38.6%. This was attributed by the institute to lack of adequate work-load and incentives.

29. Messrs Daya Shankar and Associates carried out a random activity sampling in July 1966. According to their study, the average productivity effort of men was put down as low as 33%. However, they confessed that they had not the time to study this issue in detail, and offered no views on the correctness of these assessments.

that the Shipyard was unable to construct more than three ships in any year during the last two and half decades. Increased productivity of labour in the near future does not seem to be possible due to certain factors. Adequate work load has to be linked with the definition of work content for each trade and job specifications on rational lines. Although an attempt was made to draw up job specifications for all the categories of operations some time ago, this has not met with much success owing to the complexities in the shipbuilding industry. If the Shipyard is to reduce its cost of production and operate the new pricing formula successfully steps should be taken to increase the productive efficiency of the workers. Although it cannot be denied that the Shipyard workers are efficient in their respective trades, still their contribution could be further improved through establishing incentive schemes, good industrial relations, time and motion studies, training of workers, labour welfare measures, simplification, standardisation and specialisation of work, cost control techniques, etc.

It has been proposed by some people to introduce an incentive system so as to accelerate the productivity of employees in the Hindustan Shipyard. But the oftchanging design of the ship does not allow for repetitive processes and methods of production as in the case of manufacturing industry. Even in the case of similar designed vessel, the repeat vessels may look alike, but still there exists hundred of differences. Standardisation of the product is almost impossible in the Shipyard making it difficult to propose any individual incentive plan. A careful balancing of all the factors for the establishment of a sound wage incentive system against the characteristics peculiar to the shipbuilding industry explains the adherence of many shipyards in the world to the time rate system of wage payment.³⁰ However, efforts may be made to introduce a group incentive plan, whereby the cost of mandays saved in respect of each ship compared to mandays scheduled to work could be distributed in some agreeable ratio between the employees and the enterprise. This would promote group effort, strengthen comradeship and result in substantial saving in cost of production.

30. Henry H. Trogas, "Shipping and Wage Systems" *Shipbuilding Business in the United States of America*, Vol. 1, p. 298.

As is known, an individual employee work varies from 20 to 85% of his optimum capacity and no worker can work with 100% of his efficiency. Basing on this observation an attempt is made to ask the selected group of workers (in the Hindustan Shipyard) if they thought they could work with more efficiency with the existing facilities, and if not what came in the way. Astonishingly enough it was learnt as can be seen in Table 4.28 that 86.34% said they could work more efficiently with the existing skills provided certain measures are implemented. As per table 4.29, 55.61% were of the opinion that there was not enough incentive to motivate them to work and another important reason pointed out by the workers was that there were no adequate chances of promotions, even if they worked hard. Other factors like non-recognition of work; shortage of raw materials, etc., were also mentioned by some workers. Even in the staff category 84.13% were of the opinion that they could work with more efficiency and the causes for inefficiency are shown in Table 4.43. From this it is clear, that the employees themselves feel, that they are not working to the optimum to which they can work. Hence, it is felt that the management may take suitable steps and see that workers put forth their best of energies for the benefit of the organisation. It is only the workers who can increase the productivity of the Shipyard, and that no amount of money and machines without the co-operation of properly inspired employees, can achieve increased productivity. And it may be noted here that it is not for the Chief Executive alone or the Personnel Manager to nourish and cultivate industrial relations and raise productivity. It is for all supervisors to delicately weave the total range of human resources available with them into a meaningful and purposeful pattern. Further with constant improvements in traditional practices and a better and more efficient use of labour, it is expected that it would lead to substantial improvements in output and reduction in costs.

Management by Objectives Team also noticed that the Shipyard had not chalked out any long range plan till 1966 as there were many obstacles.³¹ But for any organisation engaged

31. The reason for the Shipyard's inability to formulate long-range plans in the past as pointed out by them were (a) general indifference, (b) dependence upon Government subsidy and assistance and (c) lack of internally generated funds, pp. 1-2.

TABLE 4.28

POSSIBILITY OF IMPROVING EFFICIENCY WITH EXISTING SKILLS

	Skilled	Semiskilled	Unskilled	Overall	G1	G2	G3	Overall
Yes	89.14	80.00	83.33	86.34	82.61	89.50	80.97	84.13
No	8.52	12.50	13.88	10.25	17.39	5.26	19.03	14.29
No opinion	2.34	7.50	2.79	3.42	-	5.24	-	1.58
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(In percentage)

TABLE 4.29

IMPEDIMENTS IN ACHIEVING HIGHER EFFICIENCY

	Skilled	Semiskilled	Unskilled	Overall	G1	G2	G3	Overall
Inadequate incentives	56.59	52.50	55.55	55.61	60.87	31.58	38.10	44.44
No recognition for work	27.90	20.00	13.88	23.90	34.78	21.05	23.81	26.98
No chance for promotion	44.96	30.00	35.71	40.00	47.83	31.58	57.15	46.03
Supervisors & Management or not co-operating	13.17	5.00	2.77	12.20	4.35	21.05	9.57	11.11
Tools are not appropriate	17.05	5.00	2.77	12.20	-	21.05	4.78	7.94
Raw material shortage	6.97	2.50	-	4.88	-	26.32	-	7.94
Any other reason	2.32	2.50	-	1.96	-	5.27	-	0.16

in production, the objectives should be clearly spelt out both for the short-term as well as the long-term for which detailed planning should be made. It is essential to see while planning, that the short range plan caters to the long range plan. In order to speed up the work, the team felt that the Shipyard should develop standard designs as done by Japan. Under this system, shipyard could keep ready an assortment of standard designs so that orders with different requirements could be met by making only partial changes in the standard blueprints. In this way, the Shipyard can maintain flexibility in accepting orders.

To sum up the above analysis, to improve the performance of the Hindustan Shipyard, the time for the construction of a ship and the overall cost have to be brought down through better material control, development of ancillaries, production planning and control and better productivity of labour. Since, the modernisation and development programmes; would help to bring down the time for construction of ships, considerable effort has also to be made by the administration of the Shipyard in this direction.

Existence of nil allocated workers³² is one peculiar feature of the Shipyard. But existence of these workers certainly affects the team spirit and morale of other workers. Attempts are being made to reduce the number. In fact, the management has been successful in reducing their number from 271 in 1957 to 31 in 1971 thus saving the cost of labour to that extent as well as preventing the adverse effects on the morale of workers. This feature of nil allocation was maximum among skilled workers, a little less in semiskilled workers, and completely absent (with the exception of 1957) in the category of unskilled workers. In order to make use of the man power intensively a system of multi-trade has been introduced. This multi-trade system covering skilled and semiskilled workmen provides greater flexibility. In this, a single worker apart from performing the duties on his main trade, does certain incidental and allied jobs also. A better preplanning of the man power utilisation can go a long way in eliminating the feature of nil allocated workers altogether.

32. This group includes workers who refuse to do work other than their own trade. When there is no work similar to their trade, in their department, they remain idle. They receive their full pay.

The value of inputs and their ratios are given in Table 4.30. This table gives useful information about the material consumed, labour utilised, labour material ratio and the percentage of productive labour in total production during the period under study. The cost of productive labour as well as material have increased from year to year during the period with of course very few exceptions. The increase in the share of productive labour in total production in some years is mainly due to unsatisfactory flow of materials during that period, and sometimes due to additional payments made to labour in the form of wages, dearness allowance and contribution to provident fund.

TABLE 4.30

ANNUAL PRODUCTION* IN THE YARD FROM 1952-53 TO 1970-71
(Rupees in Lakhs)

Year	Productive Labour	Material	Total Production	Labour Material Ratio	Percentage of Productive Labour in total Production
1952-53 (13 months)	15.41	54.58	125.36	1:3.54	12.29
1953-54 (12 months)	17.44	50.20	116.49	1:2.88	14.97
1954-55	23.21	129.29	210.84	1:5.57	11.01
1955-56	25.96	147.72	247.92	1:5.69	10.47
1956-57	29.75	183.52	298.04	1:6.17	9.98
1957-58	31.58	200.80	343.31	1:6.36	9.20
1958-59	30.63	190.57	345.36	1:6.22	8.87
1959-60	35.01	257.12	401.48	1:7.90	8.72
1960-61	40.09	316.69	465.80	1:7.90	8.61
1961-62	38.54	301.99	461.43	1:7.84	8.35
1962-63	41.89	322.06	498.22	1:7.69	8.41
1963-64	44.02	305.58	475.05	1:6.49	9.27
1964-65	47.20	252.17	429.89	1:5.34	10.98
1965-66	46.97	284.99	540.17	1:6.28	8.70
1966-67	52.63	282.17	491.01	1:5.36	10.72
1967-68	66.36	419.22	681.42	1:6.82	9.74
1968-69	95.62	430.46	714.88	1:4.50	13.38
1969-70	85.29	430.92	699.00	1:5.05	12.20
1970-71	113.77	471.35	851.20	1:4.14	13.37

*Figures are inclusive of the cost of ship construction, ship repairs and capital works executed departmentally.

Table 4.31 gives an appraisal of the financial position of the Shipyard for the period 1956–57 to 1970–71. The increase in profits in the year 1970–71 was mainly due to the commissioning of the dry dock and thus being able to take up more ship repair work. It may be said that ship repairing work is an important source of revenue to the Shipyard. The losses to the Shipyard during the early years from 1956–57 to 1961–62 were said to be due to certain factors like implementation of the development programme, acquisition of additional land adjoining the Shipyard for purposes of extension and discarding of certain assets which resulted in loss upto 1961–62. Secondly, large stocks of materials taken over along with the Shipyard in 1952, did not move for a long period and the normal provision for obsolescence was considered inadequate. Accordingly, a special provision of Rs. 3 lakhs for obsolescence was made in the year 1956–57. Another important factor resulting in loss has been that, in order to provide an adequate work load during lean periods, the Shipyard undertook the construction of some small crafts on fixed price contracts which were not covered by subsidy. This resulted in a loss of Rs. 5.22 lakhs. Further, certain special benefits were granted to the workmen retrenched in 1953 and although the cost of these benefits was partially reimbursed by the Government as a special subsidy, it fell short by Rs. 4.04 lakhs. The profits in the following years 1962–63 to 1970–71 were largely due to overcoming of the above factors and building of more remunerative ships and also due to concentrating more on ship repair. However, shipbuilding should not be treated as a profit making industry as pointed out in Chapter II, and therefore profits cannot be expected from shipbuilding. The cost of ship construction in almost all countries is higher than the sale price. Shipbuilding industry receives direct subsidies ranging between a minimum of 10% and a maximum of 55% of the cost of construction or the price as the case may be in many countries including industrially advanced countries like U.S.A., France, West Germany and Italy. The Government of India has deliberately followed a policy of making available the ships built locally to Indian ship owners at international prices.

CHAPTER V

MONETARY EMOLUMENTS

A. Wages and Motivation

In modern employment relationship, monetary emoluments are expected to play a major part in motivating employees to work. The system of paying wages and salaries has become so common in the industrialised societies that we are inclined to assume that it has always been the only or major means of encouraging work.¹

In early periods many workers were not paid money wages for their contribution but they used to share the product that was produced. The practice of paying wages gained wide acceptance with the Industrial Revolution. Wages became the accepted incentive with the emergence of factories and mass production in which large number of workers sold their service to the relatively small number of employers.

Although it is opined that wages and salaries constitute a major motivator in modern employment, in recent years much dissatisfaction has been expressed about the prevailing economic theories of wages.² There is no clear understanding about the functional relationship between wage and effort in

1. Dale Yoder, *Personnel Principles & Policies*, First Edition, Asia Publishing House, Bombay, 1960, p. 463.

2. Fonseca, A.J., *Wage Determination and Organised Labour in India*, Oxford University Press, London, 1964, p. 1.

world. No one would agree for example that an offer of twice as much pay will guarantee twice as much output. What has been called the process of incentivisation, is still quite mysterious in spite of the fact that it has been experimented and still seeking to learn the general principles and limits of financial incentivisation.

Still 'fair' wages and salaries are considered to be important to most of the employees. If wages are adequate, other needs are viewed as more important; if wages are considered inadequate or unfair, they tend to become first in importance to many employees.³ Further, it has been observed that when wages are linked up with performance, they become an important motivator; when they are not so linked they do not motivate and satisfaction is low, turnover and absenteeism high.⁴ Thus a policy of fair wage and salary, and consistent internal wage and salary relationships are important to the achievement of individual and group effort in any organisation.

The term 'wage' has different connotations to the union leaders, the management officials and the workers in the plant. The union leader is apt to think of wages as "that which can be bargained about with the employer," which means principally the schedule of hourly rates of pay for different jobs in the plant. The worker however may be more concerned with his "weekly or monthly take home pay." Management is interested basically in labour costs per unit of output which depends on the quantity produced by workers in the plant as well as on

3. This conclusion is based on a study conducted by the MII Industrial Relations Section of worker job satisfactions in New England city, following a partial mill shutdown in 1948.

Charles A. Myers and George P. Shultz, *The Dynamics of a Labour Market*, Prentice-Hall Inc., Englewood Cliffs, N.J., 1951.

Similar conclusions were reached in another labour market study by Lloyd G. Reynolds, *Structure of Labour Markets*, Harper & Row, Publishers, Incorporated, New York, 1951. Social psychologists have also pointed out the importance of a hierarchy of needs, the urgency of which varies with the degree of fulfilment, 'Mason Haire, *Psychology in Management*, Second Edition, McGraw Hill Book Co., New York, 1964, Chapter 2.

4. Edward E. Lawler III, *Pay and Organisational Effectiveness – A Psychological View*, McGraw Hill Book Co., New York, 1971 (especially Part III).

how much they are paid.⁵

In all countries wage policy is a complex and sensitive area of public policy as wages frequently result in industrial unrest. Ever since Independence, the wage policy of the Government of India has been inspired by the idea of securing for industrial labour a 'living wage' an objective that had first been enunciated in the 'fundamental rights' resolution of the section on Fundamental Rights in the Indian Constitution. Dissatisfaction with wage rates is one of the most common causes of low level of productive efficiency and morale among employees. Wages have an important bearing on the standard of living and well-being of the working force. The management is therefore naturally concerned with the level of wages and salaries compared to the competing firms of the same industry and with those firms in the nearby area, satisfactory internal relationships between earnings on each job and methods of payment.

B. Labour Cost in Shipbuilding Industry

Shipbuilding industry, as has been already pointed out in Chapter II, being mainly an assembly industry, is labour intensive and will continue to be so in spite of rapid technological developments. Consequently, the scarcity and expansiveness of the labour in advanced countries has become the dominant factor in the high cost of construction of ships. The price of manpower in shipbuilding, has become a major issue and it led to the search for sights in setting up new shipyards where the price of manpower is relatively low. Even in Japan the yearly wage rise is reported to be in the order of 10% and the main reason for not including escalation clauses so far to cover rising costs is reported to be the apprehension that such clauses could open the door for unrestricted wage claims. Several European and Japanese yards have started looking for shipbuilding opportunities in countries where the wage level is lower and the atmosphere more propitious. Some have already established 'Daughter Companies' elsewhere in the

5. Lloyd G. Reynolds, *Labour Economics and Labour Relations*, Prentice Hall Inc., Englewood Cliffs, New Jersey, Fourth Edition, 1964, p. 406.

TABLE 5.1
SHARE OF EMPLOYEES IN THE VALUE OF TOTAL PRODUCTION

Year	Value of Total Production	Total amount of wages, salaries and other allowances	Percentage of wages, salaries & other all- owances to the value of total produ- ction	Total amount of welfare expendi- ture	Percent- age of welfare expendi- ture to value of total pro- duction	Total of wages, salaries, allowances and welfare expendi- ture	Percentage of wages, salaries, allowances and welfare expenditure to the value of total pro- duction
	Rs.	Rs.		Rs.		Rs.	
1957-58	3,43,31,000	77,19,626	22.49	4,74,045	1.38	81,93,671	23.87
1958-59	3,45,36,000	85,02,320	24.62	5,55,299	1.61	90,57,619	26.23
1959-60	4,01,48,000	90,85,660	22.63	5,98,630	1.49	96,84,290	24.12
1960-61	4,65,80,000	95,18,700	20.44	6,87,021	1.47	1,02,05,721	21.91
1961-62	4,61,43,000	95,12,195	20.62	6,83,137	1.48	1,01,95,332	22.10
1962-63	4,98,22,000	1,04,20,431	20.92	10,52,751	2.11	1,14,73,182	23.03
1963-64	4,75,05,000	1,06,82,283	22.49	14,26,197	3.00	1,21,08,480	25.49
1964-65	4,29,89,000	1,06,36,482	24.74	15,65,912	3.64	1,22,02,394	28.38
1965-66	5,40,17,000	1,27,91,990	23.68	20,54,054	3.80	1,48,46,044	27.48
1966-67	4,91,01,000	1,48,10,313	30.16	25,73,260	5.24	1,73,83,573	35.40
1967-68	6,81,42,000	1,60,56,263	23.56	28,13,825	4.13	1,88,70,088	27.69
1968-69	7,14,88,000	1,96,36,480	27.47	29,50,595	4.13	2,25,87,075	31.60
1969-70	6,99,00,000	1,84,73,735	26.42	29,95,473	4.29	2,14,69,208	30.71
1970-71	8,51,21,000	2,55,07,583	29.97	61,78,587	7.26	3,16,86,170	37.22

world where the labour is less expensive and the climate congenial for undertaking shipbuilding jobs outdoors eliminating the need for providing totally covered fabrication shops.⁶

The foregoing analysis of phenomenal wage rise and shortage of labour in advanced countries which is likely to get accentuated due to people preferring more and more mechanised jobs clearly shows that the outlook for the industry—shipbuilding and ship repairing—in the developing countries like India is indeed quite bright and encouraging. India has large source of manpower both skilled and unskilled. And it has been calculated that the labour cost component of total cost in Indian shipbuilding industry is about one and half of the European level.⁷

C. Wages and Salaries – Proportion and Trends

In the Hindustan Shipyard all workers are daily rated but are paid once a month on every tenth working day. Even though they are paid monthly, they are remunerated only for the days worked plus paid holidays. The Labour Union has been demanding to convert the daily rated system into monthly basis. By this it is felt that the workers would feel more secure and their morale and productivity would increase. The management, however, is reluctant on the ground that this would involve additional financial expenditure which the Shipyard is not in a position to bear. However, this issue is reported to have been under consideration of the management.

It will be quite interesting to find out the percentage share

6. An early example of European shipbuilding branching out to other countries is the Verolme Shipyard in Brazil. The Durone complex at Singapore engaged in shipbuilding and ship repairing is yet another example of Japanese move to branch off to regions with a favourable wage-level.

7. Overheads, on the other hand, are much higher in India than in Europe by about 70%. Part of this, is no doubt, due to the Hindustan Shipyard carrying considerable social (including cost of nil allocation labour) and training costs as overheads which in Europe would not be the case.

Material and machinery costs as a sequent of the total cost are only slightly different (64% in India, 60% in Europe) reflecting no doubt the fact that much of the material and machinery of Hindustan Shipyard is imported.

(Report of the British Consultants Team, op. cit., Vol.III, pp. 4-13).

of employees in the value of total production of the Hindustan Shipyard. Necessary data relating to value of total production, amount of wages, salaries and allowances paid out to employees and the amount of expenditure incurred by the management in providing various welfare amenities have been collected and presented in Table 5.1. It is heartening to note that the percentage of wages, salaries and allowances to the value of total production, by and large, has been increasing. This table also shows that the total amount of wage bill (including that of salaries) went up from Rs. 77.20 lakhs in 1957-58 to Rs. 255.08 lakhs in 1970-71—thus showing an increase of more than three times. But the value of total production has not shown the rising trend to the same extent; as a result the percentage share of wages, salaries and allowances has been pushed up from 22.49 in 1957-58 to 29.97 in 1970-71.

In addition to monetary emoluments, the management has been spending quite a substantial amount every year in providing welfare activities to their employees while calculating the cost of human factor, or the share of employees in the value of total production, this amount also is to be taken into consideration. The total amount spent by the management towards welfare expenditure or in organising different welfare activities has gone up from Rs. 4.74 lakhs in 1957-58 to Rs. 61.79 lakhs in 1970-71. This reflects a phenomenal increase in the welfare expenditure, particularly during the last year as a result of the implementation of the recommendations of the One-man Committee. The percentage share of welfare activities in the value of total production has also by and large consistently increased from 1.38 to 7.26. Thus the percentage share of employees in the value of total production increased from 23.87 to 37.22 during the period under study. This indicates that in the last year, i.e., 1970-71, more than one-third of the value of total production is shared by the human factor.

Table 5.2 shows the total amount of wages and allowances paid to workers, total amount of salaries paid to officers and staff and an aggregate of these two amounts along with their per capita figures. It could be observed from this table that the total amount of wage bill has gone up from Rs. 49.80 lakhs to Rs. 151.90 lakhs during the period. The per capita annual

TABLE 5.2

WAGES, SALARIES AND ALLOWANCES - TOTAL AND PER CAPITA

Year	Workers			Staff and Officers		Overall	
	Total amount of wages and allowances*	Per Capita wages and allowances	Rs.	Total amount of salaries and allowances	Per Capita salaries & allowances	Total amount of wages, salaries and allowances**	Per Capita wages, sala- ries and allowances
1957-58	49,80,449	1,258.65	Rs. 27,39,177	3,168.01	Rs. 77,19,626	1,632.79	
1958-59	53,35,102	1,387.18	31,67,218	3,335.16	85,02,320	1,766.83	
1959-60	57,23,826	1,487.87	33,61,834	3,488.24	90,85,660	1,881.01	
1960-61	60,39,936	1,512.63	34,78,764	3,581.81	95,18,700	1,916.04	
1961-62	59,11,259	1,423.60	36,00,936	3,648.72	95,12,195	1,850.55	
1962-63	66,78,582	1,603.50	37,41,849	3,620.81	1,04,20,431	2,004.09	
1963-64	66,58,121	1,587.16	40,24,162	3,649.89	1,06,82,283	2,015.67	
1964-65	61,09,032	1,452.79	45,27,450	3,644.82	1,06,36,482	1,953.25	
1965-66	73,63,365	1,747.76	54,28,625	4,116.02	1,27,91,990	2,312.92	
1966-67	83,28,398	1,993.44	64,81,915	4,768.50	1,48,10,313	2,675.41	
1967-68	1,00,59,939	2,433.54	59,96,324	4,457.36	1,60,56,263	2,931.06	
1968-69	1,22,00,994	2,927.59	74,35,486	5,381.23	1,96,36,483	3,556.38	
1969-70	1,12,55,197	2,779.23	72,18,538	5,136.92	1,84,73,735	3,404.51	
1970-71	1,51,90,086	3,905.47	1,03,17,497	7,156.82	2,55,07,583	4,787.66	

*Includes wages of contract labour and salaries of officers on deputation.

**Includes German Technician's salary and Salaries paid to officers on deputation.

wages and allowances have been trebled—from Rs. 1,258.65 to Rs. 3,905.47 during the period. The total amount of salaries and allowances paid to staff and officers rose from Rs. 27.39 lakhs in 1957-58 to Rs. 103.17 lakhs in 1970-71. This resulted in an increase of per capita salaries and allowances by more than two times—from Rs. 3,168.01 to Rs. 7,156.82 during the period.

The total amount of wages, salaries and allowances paid to all employees (workers, staff and officers)—the cost of human factor in terms of monetary emoluments—has increased from Rs. 77.20 lakhs to Rs. 255.08 lakhs during the period of 14 years. The per capita monetary emoluments have risen from 1,632.79 in 1957-58 to Rs. 4,787.66 in 1970-71—an increase of more than two times during the period. The increase in the total monetary emoluments paid out to employees was particularly noticeable during the last five years—probably the effect of periodical increase in dearness allowance, the perceptible change in the basic wage and other allowances consequent upon the implementation of the recommendations made by the One-man Committee.

The average annual rate of increase in per capita monetary emoluments during the periods 1957-62, 1962-67 and 1967-71 is shown below :

Year	Wages and allowances	Salaries and allowances	Wages, salaries and allowances
1957-62	+ 2.63	+ 3.03	+ 2.67
1962-67	+ 4.86	+ 6.34	+ 6.70
1967-71	+15.12	+15.04	+15.84

As the above table shows the rate of increase in respect of wages and allowances of workers has gone up from 2.63 during 1957-62 to 4.86 during 1962-67. The rate has increased by more than three times during the period 1967-71 (15.12). In respect of staff and officers the rate of increase has doubled in between the two periods 1957-62 and 1962-67 and it rose by nearly three times during 1967-71. The overall rate of increase in wages, salaries and allowances went up from 2.67 during 1957-62 to 15.84 during 1967-71. The annual rate of increase during the two periods 1957-62 and 1962-67 were mostly influe-

ned by annual increments in basic pay and Ad hoc increases in dearness allowances granted from time to time. But the annual rate of increase in monetary emoluments during the period 1967-71 was, in addition to the above two factors influenced by the revision of pay structure as per the recommendations of the One-man Committee. Consequently the rate has gone up by three to four times during this period as compared to 1962-67.

The worker's welfare depends not on how much money income he receives, but on the purchasing power of his income—the amount of goods and services which he can buy with it⁸, i.e., the real wage. However, the economists are of the view that there has been no increase in per capita real income of industrial workers in India during the last 10 years and that apparent increase in money earnings was more than offset by a continuous erosion in the value of the rupee. Accordingly, the real earnings of the three categories of workers in the Hindustan Shipyard with reference to 1956 as base year are calculated and presented in Table 5.3 to see whether the increase in money wage has been accompanied by an increase in the real wage, or whether the increase in money wage has been offset by a rise in the cost of living over the 15 years period of study. It is observed from the table the index of average money earnings among skilled workers has gone up from 107.48 in 1957 (1956 = 100) to 176.48 in 1969. But the steep increase in the cost of living during the period not only nullified this increase in money wage but also resulted in decline in the real earnings which stood at 90.43 by 1969. As regards semiskilled category while the index of money wage has gone up to 199.64 the index of real wage stood at 102.30. Thus the increase in money wages of semiskilled category seems to be more satisfactory than it was in the case of skilled workers. In respect of unskilled category the index of money wage rose by 92.87% but the index of real wage declined by 1.17%. Thus in respect of skilled and unskilled, the increase in money wages was more than offset by the increase in cost of living—leading to a decline in the real income, which was more pronounced with regard to skilled category.

The selected group of workers were asked during interviews

8. Lloyd G. Reynolds, *op. cit.*, p. 409.

TABLE 5.3
CATEGORYWISE INDICES OF MONEY AND REAL EARNINGS (1956 = 100)

Year	Skilled			Semiskilled			Unskilled		
	Index of average money earnings	Index of average real earnings	Index of average money earnings	Index of average real earnings	Index of average money earnings	Index of average real earnings			
1957	107.48	97.50	103.23	93.64	104.77	95.04			
1958	111.76	95.76	105.97	90.80	106.14	90.94			
1959	125.47	102.31	124.25	101.31	127.40	103.88			
1960	129.80	105.61	127.98	104.12	125.85	102.39			
1961	124.60	99.20	130.47	103.88	124.57	99.18			
1962	125.90	97.92	132.33	102.92	125.21	97.39			
1963	113.09	86.87	134.19	89.65	126.17	84.29			
1964	126.55	90.99	136.13	94.21	131.99	91.34			
1965	141.46	94.39	154.98	95.95	150.80	93.36			
1966	148.89	86.99	167.55	97.89	162.70	95.06			
1967	157.33	83.27	170.35	90.16	164.30	91.46			
1968	175.33	92.26	191.85	100.96	186.73	93.28			
1969	176.48	90.43	199.64	102.30	192.87	98.83			

NOTE: Categorywise figures for 1970 and 1971 are not available.

to rank the following, in order of their preference: higher wages, better working conditions, security of job, recognition of their work, fair grievance procedure, participation in management. The information elicited is presented in Tables 5.4 (categorywise) and 5.5 (for all three categories). As is seen from the Table 5.4. 57.36% of the skilled, 47.50% of semiskilled and 50% of unskilled workers desired higher wages and ranked it first. Security of job was given first preference by only 17.82% of skilled; 20% of semiskilled and 33.33% of unskilled workers. The overall position is shown in Table 5.5. As this Table shows, 54.15% of workers preferred 'higher wages' to all other items. They gave second and third preference to 'better working conditions.' Thus 'higher wages', 'better working conditions' and 'security of job' are preferred by the workers in the Shipyard. Majority of workers gave much preference to higher wages as it was learnt in the course of interviews that the take home pay was barely sufficient for the worker and his family.

It was also enquired during the course of interviews whether the workers had any additional sources of income besides their wages from the Shipyard. A common source of additional income for a majority of workers was the employment of other members of the family. Besides this, many workers had land, house property, livestock which were regular sources of income. Income from other sources on an average ranged from Rs. 50/- to Rs. 600/- whereas their take-home pay from the Shipyard ranged from Rs. 150/- to Rs. 400/-. In respect of skilled workers both take-home pay and income from other sources were higher compared to semiskilled and unskilled workers.

The extent of indebtedness of workers in the Shipyard was also enquired into. Most of the workers with families consisting of seven or more members each found it difficult to make both ends meet even with their additional income from other sources. It was learnt during the course of interviews that 90.24% of workers had taken loan from three to four sources - like money lenders, credit society, provident fund, etc., and also from their friends or co-workers. About 59% of the workers had taken loan from money lenders and paid very high

TABLE 5.4
PERCENTAGE DISTRIBUTION OF WORKERS - CATEGORYWISE ACCORDING TO THEIR RATING

Item of preference	Order of preference						Total
	I	II	III	IV	V	VI	
<i>Skilled:</i>							
Higher wages	57.36	23.25	19.39	-	-	-	100.00
Better working conditions	8.52	32.55	42.63	9.30	3.10	3.90	100.00
Security of Job	17.82	18.60	6.97	24.03	6.20	26.38	100.00
Recognition of job	13.17	15.50	24.80	31.78	14.75	-	100.00
Fair grievance procedure	-	3.87	3.10	22.48	58.91	11.68	100.00
Participation in management	3.13	6.23	3.11	12.41	17.04	58.08	100.00
<i>Semiskilled:</i>							
Higher earnings	47.50	22.50	17.50	7.50	5.00	-	100.00
Better working conditions	15.00	35.00	35.00	15.00	-	-	100.00
Security of job	20.00	17.50	12.50	25.00	10.00	15.00	100.00
Recognition of job	12.50	17.50	22.50	35.00	12.50	-	100.00
Fair grievance procedure	2.50	5.00	7.50	15.00	57.50	12.50	100.00
Participation in management	2.50	2.50	5.00	2.50	15.00	72.50	100.00
<i>Unskilled:</i>							
Higher earnings	50.00	36.11	11.11	-	2.78	-	100.00
Better working conditions	11.11	33.33	44.44	8.33	2.79	-	100.00
Security of job	33.33	13.88	13.88	16.66	5.55	16.70	100.00
Recognition of job	5.56	16.68	22.22	44.44	8.33	2.77	100.00
Fair grievance procedure	-	-	5.55	25.00	69.45	-	100.00
Participation in management	-	-	2.80	5.57	11.10	80.53	100.00

TABLE 5.5

PERCENTAGE DISTRIBUTION OF ALL WORKERS ACCORDING TO THEIR RATING

Item of preference	Order of preference						Total
	I	II	III	IV	V	VI	
Higher wages	54.15	25.37	17.56	1.46	1.46	—	100.00
Better working conditions	10.24	33.17	41.46	10.25	2.44	2.44	100.00
Security of job	20.98	17.56	9.27	22.92	6.83	27.44	100.00
Recognition of job	11.71	16.10	23.90	34.63	13.17	0.49	100.00
Fair grievance procedure	0.49	3.41	4.39	21.46	60.49	9.76	100.00
Participation in management	2.43	4.39	3.42	9.28	15.61	64.87	100.00

Emoluments

rate of interest. About 74% of the workers had taken provident fund loan in addition to loans from other sources. The average amount of indebtedness has been worked out at Rs. 2,470.72.⁹ Coming to the saving aspect of the workers, it was learnt, except for the compulsory savings deducted by the Shipyard from their pay the workers did not save anything. Only 2% of the workers had either savings account or recurring deposit account with a bank.

The monetary earnings of workers in the Hindustan Shipyard have been compared with all India factory workers in Table 5.6. This table shows index of money earnings, index of real earnings of workers in the Shipyard and that of All-India factory workers with 1961 as the base year. It may be noted here all the three categories – skilled, semiskilled and unskilled –

TABLE 5.6

EARNINGS OF HINDUSTAN SHIPYARD WORKERS IN RELATION
TO ALL-INDIA FACTORY WORKERS (1961 = 100)

Year	Hindustan Shipyard Workers		All India Factory Workers (earning Rs. 400/- or less)	
	Index of money earnings	Index of real earnings	Index of money earnings	Index of earnings
1962	101.01	98.68	106	103
1963	103.36	99.72	109	103
1964	103.69	93.64	114	94
1965	117.32	98.33	128	97
1966	125.45	92.06	139	95
1967	129.22	85.90	151	91
1968	145.32	96.05	160	94
1969	148.95	95.87	171	101
1970	165.56	96.07	180	101
1971	195.29	108.99	181	99

Source : Indian Labour Statistics, 1973.

9. Details regarding indebtedness are given in Chapter VI.

of workers have been covered by this table. The index of money earnings rose by 95.29% by 1971 but the index of real earnings of the Shipyard workers, no doubt increased, but only by 8.99%. With regard to All-India factory workers the money earnings have increased by 81% but the real earnings have actually declined. This shows the increase in monetary emoluments of the Shipyard workers compares favourably with All-India factory workers. However, it may be noted here it is only with the implementation of One-man Committee's recommendations that the position of workers in the Shipyard seems to have improved significantly, because Table 5.3 showed a decline in the real earnings of skilled and unskilled categories by 1969.

The unsatisfactory increase in the wages prior to 1970 compared to the wages of workers in the nearby industries and similar undertaking like Mazagon Docks Ltd., and the continuous increase in the cost of living compelled the workers to demand revision of pay scales.¹⁰ This has become a major cause for industrial unrest, and for the strikes in the Shipyard upto 1969. It may be noted here there was no general revision of basic wages ever since 1948 in the Shipyard. There have been some increases in dearness allowance from time to time but dearness allowance gives only partial relief against soaring prices. The Hindustan Shipyard Labour Union and the Staff Association in their joint report demanded to introduce a system of wages that could satisfy the physical and cultural needs of the workers. It was further pointed out by them that the wages in the Shipyard did not reflect the skills of the employees as nearly 30 years ago the existing wage rates were introduced by the Scindia Steam Navigation Co. Ltd., on the basis of the recommendations made by the First Pay Commission (December 1946). It was also pointed out by them that so far no appreciable effort has been made to evaluate the different jobs.

10. The Hindustan Shipyard Labour Union and Staff Association in their joint report of 1967 pointed out that the Shipyard employees were striving to earn a wage that their counterparts in the Mazagon Dock Ltd., were earning, and the question whether Shipyard can afford to pay did not arise, as it was a Government undertaking similar to Mazagon Dock Ltd. The existence of wage differential between the two similar Government undertakings, they emphasised should not be allowed to continue, as it was not conducive, for increasing productivity.

In 1964, a Central Wage Board for engineering industries (which includes the Hindustan Shipyard) was constituted by the Government of India for revision of pay scales and to consider other related matters. But as there was no unanimity in the recommendations of the wage board, a One-man Committee was appointed by the Shipyard to go into the question of revision of pay scales. While considering the revision of pay scales, the committee took into consideration the capacity of the industry to pay and the productivity of workers. The management claimed that certain items of allowances—employer's contribution under Employees' State Insurance Act, 1948 towards insurance premia, towards provident fund, contingent liability for gratuity, cycle allowance, leave and holidays (allowance), transport allowance, cost of uniforms, dhobi allowance, housing subsidy, cleaning allowance—should be added to wages to ascertain total earnings of employees. But the committee observed that where a benefit goes directly to reduce the expenses of the worker on items of expenditure which are taken into account for the calculation of "fair wage," it must necessarily be taken into account in fixing the actual fair wage payable. However, if the benefits had no connection with the items of expenditure on which the fair wage was calculated they need not be taken into account. The Committee pointed out that special contribution under the Employees' State Insurance Act is paid by the Shipyard more or less as a compulsory tax without any benefit to its employees, who are being granted exemption by authorities under the Act itself.¹¹ Benefits of insurance, provident fund and gratuity occur only on retirement. They, no doubt, add to the present mental comfort of employees, but the committee added that they did not directly reduce their expenses. The other items are compensatory in nature. Medical benefits, educational benefits and canteen benefits have been taken into account in determining the lower limit. They are kept in mind for higher stage of fair wage also. But it is

11. Regarding Employees' State Insurance Scheme, though the workers were told that it was essentially in their interest, the union opposed and asked for exemption which was granted year after year. The management however continues to pay its due share of contribution to the Employees' State Insurance Corporation.

pointed out that their actual value in terms of money to each employee is difficult to calculate.¹²

The recommendations made by the One-man Committee regarding the revision of wage structure were accepted by the Labour Union, Staff Association, and the Management. They were implemented with effect from September 1969.

The following figures give the minimum and maximum rates of old pay scales (1947-48) and new pay scales (after revision by the One-man Committee):

	Old pay scales before revision		New pay scales after revision	
	Minimum	Maximum	Minimum	Maximum
Selection Grade	3.50/4.62	4.25/5.62	8.71/11.05	10.73/13
Skilled	1.75/2.00	3.37/4.37	6.33/8.46	8.22/10.56
Semiskilled	1.19/1.37	2.19/2.31	6.29	6.89
Unskilled	1.12/1.19	1.50/1.94	6.29/6.29	6.54/no increment

Monthly rated scales (staff):

Non-Matric	42	92	176	229
Matriculation	60	131	194	309
Graduates	85	182	219	412
Selection Grade (yards)	42/190	97/300	176/428	239/531
Selection Grade (office)	60/225	75/300	194/476	209/865
Class IV employee	30/70	45/117	164/189	174/282

It is observed from the above figures that minimum of various categories within the selection grade of daily rated workers was Rs. 3.50/4.62 and the maximum was Rs. 4.25/5.62 as per the old pay scale whereas after revision the minimum of the various pay scales was more than doubled among the various categories within the selection grade. Similarly in the case of skilled, the minimum basic pay was increased from Rs. 1.75/2.00 to Rs. 6.33/8.46; semiskilled from Rs. 1.19/1.37 to Rs. 6.29; and unskilled from Rs. 1.12/1.19 to Rs. 6.29. The maximum limits have also been raised substantially in the course of this revision. In the case of staff while the minimum

12. However, the per capita expenditure on various benefits and Programmes introduced by the management has been calculated and shown in Chapter VI.

in the old scale was between Rs. 42 and Rs. 225 and the minimum in the new pay scale was Rs. 164. The maximum being Rs. 300 in the old scale and in the new scale it was Rs. 865. Thus it is seen as per new pay scales, no worker would get less than Rs. 6.29 per day and no staff member would draw less than Rs. 164 per month. This shows that the new pay scales are favourable to employees when compared to the old pay scales.

Dearness allowance to compensate 100% of increase in the cost of living is recommended to the employees drawing upto Rs. 200/- per month and for the employees drawing above Rs. 200/- per month the compensation can be graduated at 20% less for each slab of Rs. 200/-.

The recommendations made by the One-man Committee with regard to other allowances are as follows :

Position existing before the recommendations of One-man Committee	As recommended by One-man Committee
Yard allowance paid to only those employees who are in service on 1-12-1957 under an agreement and the subsequent recruits were not to be paid.	Yard allowance to be paid to all clerks and class IV employees who are called to work for 48 hours a week at the rates prescribed in the agreement dated 1-12-1957.
Out door allowance : Restricted to staff drawing Rs. 100/- or below.	Out door allowance : to be paid irrespective of the rate of pay drawn by the individual.
Section head allowance : Paid but subsequently stopped.	To be paid as long as that particular duty is performed by the workers.

It has been calculated that the implementation of the One-man Committee's recommendations resulted in an increase of wage bill by Rs. 3.85 lakhs per month.

The committee has rejected certain demands namely compensatory city allowance, over-time allowance (for office staff), conveyance allowance and leave travel concessions, on the ground that it was beyond the capacity of the Shipyard to pay

these allowances. With regard to certain other demands¹³ put forward by the union the Committee rejected on the ground that they were not justified.

In spite of this increase in total emoluments the employees and their organisations are not satisfied. They started demanding for fresh revision of wage structure. The following table furnished by the management of the Shipyard, provides an indexed comparison of the minimum, maximum, total emoluments as on the 1st July 1975¹⁴ payable to Selection Grade, Highly skilled, Skilled, Semiskilled and Unskilled categories of workmen in the Shipyard, Mazagon Dock Ltd. (Bombay), Garden Reach workshop (Calcutta), Cochin Shipyard (Cochin) and Bharat Heavy Plate & Vessels Ltd., (Visakhapatnam).

Name of the organisation	Selection Grade		Skilled		Semiskilled		Unskilled	
	Higher	Skilled						
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Hindustan Shipyard Ltd.	100	100	100	100	100	100	100	100
Mazagon Dock	122.5	200	104.7	181	—	—	100	130
Garden Reach Workshop	84	78	112.9	91.3	95.3	103	95.8	104.1
Cochin Shipyard	—	—	136	170	119	138.8	115.6	135
Bharat Heavy Plate & Vessels	—	—	140	254	125	154.7	120	151.8

It is observed from the above table, that for selection grade (highly skilled) category, the total emoluments – minimum and maximum – in Mazagon Dock were higher than in the Shipyard and the Garden Reach Workshop. The maximum limit in Mazagon Dock is twice that of the Hindustan Shipyard and

13. Increase in compensatory allowance, travelling allowance, escort allowance, store allowance, cyclostyle operator's allowance, the arrears of dearness allowance alleged not to have been paid prior to 1967.

14. Indices are worked out taking minimum and maximum emoluments at the Hindustan Shipyard for each of these categories as 100.

still more in the case of Garden Reach Workshop. The minimum and maximum limits of pay of the skilled, semiskilled and unskilled categories, in Bharat Heavy Plate & Vessels are the highest (a local public sector undertaking) compared to all the four shipyards. In Cochin Shipyard, the total emoluments for the above three categories are very near to those of Bharat Heavy Plate & Vessels. Internationally the wages of shipbuilding workers as already mentioned above have been constantly on the increase. For instance between 1969 and 1972 the wages of Japanese shipbuilding workers have risen by 70%. According to the reports published in the press the increase was 20% in 1973 and 28% in 1974. Taking into account these differences and developments in total emoluments, the Shipyard Labour Union and Staff Association are demanding for a second wage revision.

D. Payment of Bonus

Next to basic pay and dearness allowance, bonus has come to occupy an important place in the structure of workers' emoluments in India. The practice of paying bonus was first started as an exgratia payment by some employers during the closing period of the I World War when industries were earning huge profits. This concept of bonus as an exgratia payment was accepted by some tribunals after the II World War although it was recognised that bonus could become a subject matter of industrial disputes. However, the position had changed subsequently, and the approach by adjudicators, was that "where the industry has the capacity to pay and had been so stabilised that its capacity to pay may be counted upon continuously, payment of living wages is desirable, but where the industry has not that capacity or its capacity varies or is expected to vary from year to year, so that the industry cannot afford to pay living wages, bonus must be looked upon as the temporary satisfaction, wholly or in part, of the needs of employee.¹⁵ The Labour Appellate Tribunal, in its award on dispute in the textile industry in Bombay in 1950 observed

15. Quoted in *Industrial Awards in India*, Ministry of Labour and Employment, Government of India, 1960, p. 84.

“it (bonus) cannot any longer be regarded as an exgratia payment, for it has been recognised that a claim for bonus if resisted, gives rise to, an industrial dispute which has to be settled by a duly constituted industrial court or tribunal.”¹⁶

The bonus commission appointed in December 1961 accepted compulsory profit sharing concept of bonus, which neither depends upon the goodwill of employers nor on the gap between actual wage and the living wage. “We think it proper to construe the concept of bonus as sharing by the workers in the prosperity of the concern in which they are employed.”¹⁷

Accepting the recommendations of the Bonus Commission, the Payment of Bonus Act was passed in 1965. The Act applies to every factory and every other establishment employing 20 or more persons and all non-departmental public sector undertakings which compete at least to the extent of 20% of their annual turnover with private enterprises. 60% of ‘available surplus’¹⁸ shall be payable as bonus to the workers subject to a minimum of 4% (or Rs. 40 whichever is higher and a maximum of 20% of total wages and salaries including dearness allowance with the provision of set-off and set-on, in succeeding four accounting years. An employee drawing a wage or salary not exceeding Rs. 1,600/- per month and who has worked in the establishment for not less than 30 working days and who is not dismissed is entitled to claim bonus.

The Hindustan Shipyard—A public sector undertaking which does not compete even to the extent of 20% of its annual turnover with private sector undertakings, is exempted from the purview of the payment of Bonus Act. In spite of this, the management has started paying exgratia bonus with effect from 1965-66 at the minimum rate 4% (or Rs. 40/- whichever is

16. *Labour Law Journal* – 1247, 1950.

17. Report of the Bonus Commission (1964) Ministry of Labour & Employment, Government of India, p. 20.

18. The ‘available surplus’ is calculated after deduction of prior charges from gross profits. The prior charges are: depreciation and development rebate (under the Income Tax Act), direct taxes, return on paid-up capital at 8.5%, return on reserves at 6% and remuneration for working partners.

higher) of the total emoluments. The total amount paid during the period 1965-66 to 1970-71 is shown below :

Year	Total amount paid as exgratia bonus
	Rs.
1965-66	4,75,000
1966-67	5,40,430
1967-68	5,24,938
1968-69	5,79,131
1969-70	5,49,960
1970-71	7,26,525

As the above figures show, the increase in total emoluments during 1970-71 consequent upon the implementation of recommendations of One-man Committee has resulted in the increase of amount of bonus paid to employees by nearly Rs. 2 lakhs. It is heartening to note that with effect from 1971-72, the minimum rate of bonus has been increased from 4% to 8.33% or Rs. 80/- whichever is higher subject to a maximum of Rs. 750/- in accordance with the decision of Government of India to this effect.

Beyond Monetary Emoluments

A. Growth and Significance

Within the working life of many industrial workers an almost unnoticed social revolution has taken place in the employment relationship in industry. 50 years ago an employer purchased, for a simple hourly wage, such human skills and labour as he required for the work he had in hand. "Today, not only have, human relations in the work place, become generally more complex, but there has been an extensive growth of what have come to be known as 'Fringe Benefits.'"¹

Provision of fringe benefits has become a regular feature of industrial employment system since the II World War. In many countries, employers have instituted several schemes to provide employees (over and above normal wages and allowances) with decent housing, recreational and cultural amenities, paid holidays and vacations, social security benefits, etc.

The need for providing benefits to employees beyond the

1. Clarke, R.O., "The Social aspects of Industrial Employment," *Industrial Relations Contemporary Problems and Perspectives*, Edited by B. C. Roberts, Asia Publishing House, Bombay, 1962, p. 166.

In the broadest sense of the term, fringe benefits apply to the following : (i) employees services ; (ii) pay for time not worked ; (iii) supplementary compensation ; (iv) contribution to employee security.

Lovejoy, L.C., *Wage and Salary Administration*, The Ronald Press Co., New York, 1959, p. 373.

monetary emoluments, hardly received attention in any country in the early stages of industrialisation.² In the beginning, these benefits were extended “partly from humanitarian considerations and partly from an urge to act upon the concept of scientific meliorism which was advocated by such philosophers as Comte, J.S. Mill, the Martineaus and George Eliot.”³ Later on the exposition of social ideas by such thinkers as Robert Owen in the United Kingdom and Leclaire in France also had its impact.⁴ In many countries of Europe, these ideas profoundly influenced the course of Social Welfare legislation and the programmes of social assistance during the next 70 years or so. The range of fringe benefits available to workers grew gradually, partly due to enlightenment on the part of employers and partly due to the struggle of unions. After the I World War, these benefits expanded rapidly mainly because of the influence of the International Labour Organisation⁵ as also due to the emergence of a new managerial class.⁶ Added to this, there was the influence of the researches in scientific management and industrial psychology, which furnished ample evidence as to the beneficial effects produced by fringe benefits on the attitudes, morale and productivity of workforce. This trend reinforced by the public concern, especially in underdeveloped countries, for the improvement of the working and living conditions of industrial workers, led to an extension of fringe benefits. Consequently in some countries, a large part of the increase in real wages since 1938 occurred in the form of fringe benefits and after the II World War, “these benefits expanded enormously, often as an

2. Report of the National Commission on Labour, Ministry of Labour & Employment, Government of India, New Delhi, p. 111.

3. Encyclopedia of the Social Sciences, Vol. 15, pp. 396-397.

4. The Employers Federation of India, Fringe Benefits in Indian Industry, Monograph No. 5, Bombay, p. 5.

5. Through numerous conventions and recommendations, the International Labour Organisation promoted joint International action to secure the enforcement of several benefits such as the provision of holidays, sickness, insurance, compensation for accidents and occupational diseases, old age and invalidity insurance, rest periods, paid vacations, etc.

6. The new managerial class particularly in underdeveloped countries realised the need to secure the cooperation of labour in the process of production.

alternative to wage increases.”⁷

Since the development of fringe benefits was influenced by historical and socio-economic circumstances prevailing in each country, the proportion of fringe benefits in the wages of employees has varied considerably from country to country. While in some countries fringe benefits constituted only negligible amounts, in others they formed one-third or more of the cash wages received by employees.⁸

Just like in Western Countries, fringe benefits paid in the early phases of industrial development of India consisted mainly gratuitous payments made by employers to deserving employees. However, the number and quantity of voluntary benefits continued to increase, partly as a result of the growing social consciousness among workers and partly due to voluntary action initiated by enlightened employers.⁹ This trend was strengthened by the legislative measures taken by the State like Workmen's Compensation Act in 1924. Even so, the extent of fringe benefits received by employees remained relatively insignificant and varied considerably from factory to factory. The Royal Commission on Labour recommended for greater uniformity in the welfare schemes and made several suggestions to increase the material welfare of industrial workers, many of which were subsequently incorporated by amendments to the Workmen's Compensation Act in 1933 and the Factories Act in 1934.

Fringe benefits increased considerably during the II World War period partly as a result of the voluntary action taken by a number of employers to provide such facilities as housing, medical care, introduction of canteen service and retirement benefits, and partly due to the legislative steps taken by the Government of India by promulgating ordinances.¹⁰ Later on the findings of the Labour Investigation Committee had a profound effect on

7. International Labour Organisation, "International Comparisons of Real Wages—A Study of Methods," New Series No. 45, pp. 19-20.

8. *Indian Labour Journal*, December 1960, pp. 1425-1427.

9. Report of the Royal Commission on Labour, 1931, p. 63.

10. The most notable example of such ordinances was the promulgation of the Coal Mines Labour Welfare Fund Ordinance in January 1944 which provided for the levy of a case on the output to finance welfare measures for workers employed in coal mines.

the course of labour welfare legislation in the post-independence period. The Government of India had taken several steps so as to strengthen the welfare programmes in different industrial undertakings. Factories Act 1948, Plantations Labour Act 1951 and the Mines Act 1952, Employees' Insurance Act 1948 are some of the legislative steps taken providing for comprehensive provisions regarding welfare, health, safety and social security of workers. The awards given by Industrial Tribunals and the collective agreements concluded between employers and workers also contributed in no small measure for the expansion of the scope and content of fringe benefits in many industrial undertakings throughout the country.

Fringe benefits now make up a significant part of labour costs of different firms, and it is likely that the proportion will continue to increase. Benefit programmes over and above the total wages and salaries have become an integral part of the overall personnel policies and they cannot be considered in isolation. The organisational tactic of providing several types of employee benefits have spread as a logical response to the rapidly increasing demands for more benefits.¹¹ They are expected to play a major role in stimulating the employees to work and in making them contribute best effort and skill to the enterprise. Further, employers increasingly found that it made little difference, how the total manpower expense was allocated between wages and benefits as long as the wages remained reasonably competitive...Moreover in the case of such benefits where the rupees to be spent possessed at least partial deferrability (as with most pension plans) those discounted rupees actually became cheap rupees to the organisation.¹² Further, generous fringe benefits help create a more favourable 'image' of the company in the eyes of the public, thus making it easier for the management to recruit high-calibre employee and to

11. Unions have been alert to the changing circumstances ushered in by wage regulations in some countries. They shifted their emphasis from wage rate demands to cost of living and productivity adjustment and as they exhausted these opportunities, they switched rapidly to demand for more fringe benefits.

12. William Werther Jr., "A New Direction in Rethinking Fringe Benefits," *MSU Business Topics*, Michigan State University, Winter, 1974, p. 35.

maintain amicable relationship with the entire community. "Like fair wages and salaries adequate health and welfare programmes impress the community with the value of the firm particularly as these programmes become more widely identified with what constitutes a 'good company.'"¹³ The employer is benefitted through reduced turnover, increased morale and productive efficiency of workers in return for the cost of these additional benefits provided beyond monetary emoluments.

B. Welfare Expenditure

The Hindustan Shipyard provides a number of employee benefits and programmes over and above monetary emoluments, in the form of housing, medical aid, canteen, transport, contribution to staff insurance premia, debt relief and retirement benefits. Table 6.1 shows the amount spent by the management towards welfare expenditure in total as well as per employee under six major heads, viz., housing, medical aid, education, canteen, transport, recreation, contribution to staff insurance premia and retirement benefits.¹⁴ The total amount of welfare expenditure has gone up from 4.74 lakhs in 1957-58 to 61.79 lakhs in 1970-71. The increase of welfare activities quantitatively as well as qualitatively—particularly the provision of house rent allowance, medical reimbursement, liberalisation of retirement benefits, etc., has been mainly responsible for this phenomenal growth of welfare expenditure. The per capita welfare expenditure has increased from Rs. 100.53 to Rs. 1,163.14 during the period 1957-58 to 1970-71.

C. Housing

Inadequate and poor quality of housing, development of slums around industrial areas are some of the attendant evils of industrialisation.¹⁵ While the already crowded industrialised towns are still being more crowded, lack of suitable housing

13. George Strauss, Leonard R. Sayles, op. cit., p. 719.

14. It may be noted here, in respect of housing and transport, information on certain new items of expenditure was available only from 1966-67 and 1967-68 respectively. Consequently the total amount spent under these two heads cannot be strictly compared with the amounts spent in the earlier years.

15. Sivayya, K.V., Das, V.B.M., *Indian Industrial Economy*, S. Chand & Co. (Pvt.) Ltd., New Delhi, 1975, p. 506.

TABLE 6.1
MAJOR HEADS OF WELFARE EXPENDITURE

Year	Housing		Medical Aid		Education		Canteen		Transport	
	Total	Per Employee	Total	Per Employee	Total	Per Employee	Total	Per Employee	Total	Per Employee
1957-58	Rs. 31,900	Rs. 6.77	Rs. 16,272	Rs. 3.45	Rs. 6,405	Rs. 1.36	Rs. 36,181	Rs. 7.67	Rs. 23,967	Rs. 5.08
1958-59	38,100	7.98	14,887	3.12	4,285	0.90	33,624	7.04	22,720	4.76
1959-60	39,590	8.27	12,905	2.70	4,169	0.87	38,572	8.06	23,630	4.94
1960-61	38,733	7.81	10,220	2.06	3,617	0.73	40,970	8.26	23,093	4.66
1961-62	35,089	6.85	12,430	2.43	6,648	1.30	78,434	15.31	25,460	4.97
1962-63	27,326	5.26	14,464	2.78	4,663	0.90	2,20,908	42.51	26,126	5.03
1963-64	29,737	5.62	16,448	3.11	37,101	7.01	2,71,755	51.32	25,352	4.79
1964-65	35,853	6.59	9,581	1.76	37,954	6.98	3,26,976	60.11	27,402	5.04
1965-66	28,139	5.09	14,230	2.58	34,937	6.33	4,01,728	72.74	28,310	5.13
1966-67	4,15,164	75.13	16,275	2.95	42,790	7.74	4,10,860	74.35	29,205	5.29
1967-68	3,85,933	70.67	47,360	8.68	36,866	6.75	4,93,693	90.44	1,96,110	35.92
1968-69	1,01,459	18.84	73,028	13.56	32,462	6.03	4,31,496	80.13	2,84,377	52.81
1969-70	2,20,636	41.72	93,502	17.68	36,227	6.85	2,83,000	53.51	3,73,338	70.59
1970-71	10,35,903	195.01	1,35,410	25.49	44,195	8.32	3,58,725	67.53	4,64,665	87.47

Year	Recreation		Contribution to Staff Insurance		Retirement benefits		Total Welfare Expenditure		Percentage of Welfare
	Total	Per Employee	Total	Per Employee	Total	Per Employee	Total	Per Employee	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1957-58	1,681	0.36	15,376	3.24	3,42,263	72.59	4,74,045	100.53	0.14
1958-59	1,961	0.41	20,242	4.24	4,19,480	87.81	5,55,299	116.24	6.53
1959-60	4,427	0.92	24,144	5.04	4,51,193	94.23	5,98,630	125.03	6.59
1960-61	6,660	1.34	24,895	5.02	5,38,833	108.64	6,87,021	138.51	7.22
1961-62	11,830	2.31	23,294	4.55	4,89,952	95.64	6,83,137	133.35	7.18
1962-63	22,487	4.33	27,712	5.33	7,09,065	136.44	10,52,751	202.57	10.10
1963-64	11,632	2.20	28,157	5.32	10,06,015	190.00	14,26,197	269.35	13.35
1964-65	14,293	2.63	31,089	5.71	10,82,764	199.04	15,65,912	287.85	14.72
1965-66	10,446	1.89	32,543	5.89	15,03,721	272.27	20,54,054	371.91	16.06
1966-67	12,068	2.18	33,043	5.98	16,13,855	292.05	25,73,260	465.66	17.37
1967-68	12,862	2.36	3,748	0.69	16,37,253	299.92	28,13,825	515.45	17.52
1968-69	17,362	3.22	35,000	6.50	19,75,411	366.84	29,50,595	547.93	15.03
1969-70	14,544	2.75	30,000	5.67	19,44,226	367.60	29,95,473	566.36	16.21
1970-71	28,910	5.44	41,000	7.72	40,69,779	766.15	61,78,587	1,163.64	24.22

accommodation causes more worry and fatigue among employees and thus to some extent comes in the way of properly discharging their duties.¹⁶

The Hindustan Shipyard maintains a good housing colony which is very near to the plant site. This colony called Gandhigram, consists of 1,731 residential quarters of different types (by the end of 1971-72) which are built in an extensive site of 145 acres. All modern amenities such as electricity, black top roads, parks, marketing centres, drinking water taps, drainage have been provided. Out of the above quarters 1,196 have been allotted to employees on reasonable fixed rents and the rest of the quarters are allotted at 10% of the basic pay plus 5% dearness allowance. The per capita recurring expenditure under housing has increased from Rs. 6.77 in 1957-58 to Rs. 195.01 in 1970-71. Amount incurred towards repairs and maintenance of the housing colony and the amount of house rent allowance (Rs. 7.78 lakhs) paid during 1970-71 have been largely responsible for this increase.

However, only 32.20% of employees are provided with housing accommodation. A large number of workers and staff are staying in rented houses, away from the yard, paying more than double the rent (of company owned houses) for smaller accommodation and at the same time incurring additional expenditure for coming daily to the Shipyard. It will be noted that 44.88% of the selected group of workers and 30.16% of staff were coming to the yard from a distance of above three miles. In fact one of the reasons, for more absenteeism and late coming was the employees staying far-off from the yard. The employees staying in their own houses also showed a desire to move to the company house if available.

In order to elicit further information, the selected group of workers were asked about the mode of conveyance being used by them to come to the Shipyard. 38.54% of workers and 33.33% of staff were coming by walk. Only about 25.85% of workers had cycles or other mode of conveyance and the rest

16. It has been rightly remarked that "a house is not just a roof over four walls or a place to sleep and take shelter, it is an extension of human personality (Vaid, K.N., *Labour Welfare in India*, Sree Ram Centre for Industrial Relations, New Delhi, 1970, p. 195).

came by bus or by some other means. Regarding the staff, the situation seems slightly better as 41.27% of staff are having own conveyance. No doubt, the management was kind enough to sanction loans for the workers for purchasing cycles. However, the workers pointed out during the course of interview that when the cycle needed some type of repair or change of part they did not always have ready cash, nor could they afford to come by bus, so they either stayed back at home or went walking.

Thus it can be seen more houses need to be built for workers and staff and particularly after the commencement of Dry Dock¹⁷ if the regular attendance is to be maintained and efficiency is to be improved. A proposal for the construction of 800 type II quarters at an estimated cost of Rs. 100 lakhs was submitted to the Government in the year 1971. Since the above did not materialise, the management has taken up the matter with the State Government and the Life Insurance Corporation of India.

D. Medical Aid

It is hardly necessary to stress the loss due to sickness to the workers and their organisation in a poor country like India where vitality of workers is low and where wages are just sufficient for bare subsistence.¹⁸ Both sickness and accidents are recognised to be among the most widespread causes of mandays lost with their consequent effect on production. Therefore, the importance of measures designed to provide medical assistance to employees in times of illness and accidents have been recognised in most of the industrial establishments.

The Shipyard has three modern well equipped dispensaries—one in the yard and two in the housing colony—with qualified medical personnel. Free medical aid is given to the employees and their families residing in the colony. A maternity centre is

17. With the functioning of Dry Dock, more number of workers are recruited, and the already inadequate houses have further become inadequate.

18. Pant, S.C., *Indian Labour Problems*, Chaitanya Publishing House, Allahabad, 1973, p. 299.

attached to the colony dispensary. All cases of antinatal and postnatal are treated and polio vaccine is administered to the children of the employees periodically. A family welfare adviser and one social worker are attached to the colony dispensary. They visit the families at their houses and also in the clinic and offer advice on children care. Vasectomy operations are done periodically with the aid of a mobile surgical unit. The dispensaries also serve as first aid centres. An ambulance is provided with all necessary equipment for the purpose of evacuating patients to the local Governmental Hospital from their residence as recommended by the medical officer. First aid boxes with required material and stretchers are also kept in various workshops of the yard and first aid is given on the workspot. The per capita expenditure under medical aid has increased from Rs. 3.45 in 1957-58 to Rs. 25.49 in 1970-71. The total amount spent by the management annually under medical aid has increased from Rs. 16,272 to Rs. 1,35,410 during the period 1957-58 to 1970-71 (Table 6.1).

With all the above medical facilities the workers and staff were not very happy. When they were asked whether the present medical benefits were adequate during the interviews, only 12.99% of the selected group of workers felt they were adequate; 67.43% workers said that the medical benefit was not adequate. Among the selected group of staff, only 1.59% said that it was adequate whereas 98.41% said it was very insufficient. The suggestion put forward by the various categories was that at present employees residing in colony only could make use of the facility; therefore various branches should be opened by the management at various places so that majority of the employees could make use of the facility. Some workers have also expressed the opinion that medical reimbursement should be given to workers also, as they were more in need than those of the officers.¹⁹ Those who were availing the medical benefit

19. But it is heartening to note, the facility of reimbursement of medical expenses has been extended to the staff and workers of the Shipyard from the 1st April 1973. According to this scheme, the expenses incurred on medical treatment by the staff and workmen and their families are reimbursed to them on the basis of certificates issued by the company's medical officers or authorised doctors, subject to a maximum limit of Rs. 180/- per annum per employee.

said that the dispensary devoid of good and adequate medicines,²⁰ had become only a first aid centre and they always tried to push off most of the cases to the Government General Hospital. Others complained that patients stood in queues for hours due to insufficient number of doctors attending on them.

E. Canteen

Under Section 46 of the Factories Act, every factory, engaging more than two hundred and fifty workers, is required to maintain a canteen. The layout, upkeep and working of the canteen are subject to rules framed by the State Government. Rule 68 stipulates, among other things, that the prices of items sold in the canteen should be on non-profit basis. Canteens run by the employees themselves on a co-operative basis, however are exempted from this provision and their prices can include a profit upto 5% of the cost price. The research studies conducted on fringe benefits show that a subsidised canteen creates a positive effect on the work life of the employees and reduces absenteeism and tardiness among employees. The break for the meal in the middle of the day gives welcome relaxation to the workers, therefore a little attention, paid by the welfare officer to the canteen surroundings is worth while. Pleasing colours to the walls, windows and doors, and display of suitable pictures can transform the canteen.²¹

The canteen in the Hindustan Shipyard is as old as the yard itself. Since its inception upto 1948, it was managed, controlled and supervised by a local private contractor. In 1948, with the passing of the Factories Act, the Shipyard took over the canteen from the private contractors.

The canteen made a profit only in the year 1955-56 to the tune of Rs. 349/-. From 1956-57, the excess of expenditure over revenue was increasing from year to year and this deficit was covered by the subsidy given by the management starting from 1962-63. Thus the amount of subsidy has gone up from Rs. 47,799 in 1962-63 to Rs. 3,47,000 in 1970-71. This was

20. As pointed out by one or two workers, the only thing available was APC Powder.

21. *Personnel Management in India*, Indian Institute of Personnel Management, Asia Publishing House, Bombay, 1973, p. 276.

mainly due to the fact that while the cost of materials used has gone up abnormally between 1948 and 1971 the prices of the items were not increased. However, to some extent, the abnormal increase in deficit was also caused by carelessness and increasing wastage.

The total amount spent by the management towards canteen service rose from Rs. 36,181 in 1957-58 to Rs. 3,58,725 in 1970-71 an increase of nearly ten times. The per capita expenditure also rose from Rs. 7.67 to Rs. 67.53 during the same period (Table 6.1).

Certain steps have been taken by the management to improve the structure and service of canteen. For the first time, subsidised lunch scheme is introduced for staff and workers within the Shipyard premises in July 1972. The new canteen now is well equipped with all amenities and equipment and with necessary staff. It is provided with modern electrical cooking range, a sales counter and a big dining hall with adequate furniture. Beverages, snacks and rice packets are supplied to employees at concessional rates. The canteen staff are supplied with uniforms to ensure cleanliness. Besides this, a staff tea club is also provided near the administrative building for the benefit of the officers both in the morning and evening. The canteen is fully patronised by the employees. Credit sales are quite satisfactory and maximum number of workmen are taking advantage of this. Each worker is allowed a credit of Rs. 5/- per month by supplying coupon books on credit which is recovered from wages. Canteen managing committee formed with the representatives of the employee organisations is functioning satisfactorily.

There is one dining hall adjacent to the canteen with adequate furniture, water taps, fans, water cooler for the staff members. Lunch rooms with dining tables, benches and taps are provided at three different places in the yard for the convenience of workmen. The construction of a spacious lunch hall with modern amenities has been completed. Construction of a second dining hall has been provided in the integrated development programme. Adequate and suitable facilities are also provided to workmen for washing their hands, etc., and these include arrangements of wash basins with taps and soaps.

For officers there is one cafeteria separately where both vegetarian and non-vegetarian meals are served unlike in staff and workers' canteen where only vegetarian meals is served. The total amount of subsidy paid by the Shipyard in respect of officers' lunch during 1972-73 was Rs. 34,394/-.

In order to find out how far the canteen was being utilised by the employees, the selected group of workers and staff were asked if they made use of the canteen and if so what was their opinion about its services. More than 66% of the selected group of workers said that they took advantage of the canteen. But only 8.29% of the selected group of workers felt its services were good, 58.54% felt its service was poor.

Among the selected group of staff 69.84% utilised the canteen; however only 3.17% said the services were good and 46.03% felt it was poor and there was every need for improving its services.

Some of the workers in the selected group were more critical about the canteen and said they were going to a nearby hotel. Others said they did not mind paying more, if the quality of food was improved.

Regarding officers, while most of them felt there was a need for improvement they were also aware of the fact that the management had already taken steps to improve the existing canteen (the building of the new canteen was under construction at the time of the interviews).

F. Education

The Royal Commission on Labour observed "modern machine industry depends in a peculiar degree on education, and the attempt to build it up with an illiterate body of workers must be difficult and perilous."²² Accordingly, education of industrial workers is receiving special attention of the Government, employer and the unions throughout the country.

The Hindustan Shipyard has a sufficiently well laid programme to impart education to its workers. 'Workers' Education Scheme' is sponsored by the Government of Andhra Pradesh and the scheme was inaugurated in the Shipyard in 1962.

22. *Report of the Royal Commission on Labour in India*, Government of India, p. 27.

About 1896 workers have been trained at the unit level classes by the year 1971-72. The management of the Shipyard provides accommodation and other facilities within the yard and also contributes to a reasonable amount of leave facilities, etc., for educational tours made under the system. The duration per trade is two years, which is followed by an examination on the completion of the course.

The management is also taking keen interest in the field of education of employees' children, by setting up of an educational society called Gandhigram Educational Society in the year 1959. This society is managing three institutions, viz., (a) Gandhigram Nursery School ; (b) Gandhigram Junior Basic School ; and (c) Gandhigram High School.

The Gandhigram Nursery School was started in 1959 with kinder-garten class for pre-school age children in English medium. The Gandhigram Junior Basic School was started in 1962 to cope up with the increased needs of the children between six and 11 years' age group in the colony and provides instruction from first to fifth class. It is temporarily located in one of the rest sheds in the colony. The educational society took over the middle school run by Shri Ramakrishna Mission and upgraded this school into high school in the year 1961. The management is meeting the net deficit for running the school. The school is located in a spacious building.

Prior to starting of the above schools by the Educational Society, the management of Scindias, the predecessor of the Hindustan Shipyard Ltd., started an elementary school departmentally in the year 1946. This school is located in a spacious building with a well equipped auditorium attached to it.

Besides the above schools—two elementary schools are being run by the municipality. The management has also allotted site for the school run by Agnikula Kshatriya Sangham and gave free accommodation to the school run by the municipality. Free food is being supplied to about 750 school children of the Gandhigram Vidyanilayam and Nursery schools. The expenditure towards the cost of the free food is being borne by the management.

In the year 1970-71, the management received an educational grant of Rs. 35,517 from the State Government and the manage-

ment spent to the extent of Rs. 44,195 to meet the deficit. The Gandhigram High School has been upgraded into a Junior College from the academic year 1973-74. The Gandhigram Vidyanilayam is upgraded into upper primary school and the VI class is started from the academic year 1973-74.

The total expenditure incurred by the management under education has increased by nearly seven times (Rs. 6,405 to Rs. 44,195) during the period 1957-58 to 1970-71 and this is also reflected in the growth of per capita education expenditure from Rs. 1.36 in 1957-58 to Rs. 8.32 in 1970-71 (Table 6.1).

Information was collected from the selected group of workers regarding educational facilities provided for their children by the management. On the whole the opinion of the workers was favourable but for the few who complained that the number of seats were limited and therefore their children could not get admitted. They pointed out that recommendations were needed to get seats. Those workers whose children were already availing the facility of the schools, said that the schools were only upto 10th class, and management should take more interest to see that higher education could be imparted in the colony itself. Recently with the opening of Junior College, the Intermediate class was started. Some workers have also pointed out the necessity of providing transport to their children for going to and coming from school located in town as in the case of children of officers and staff. Some workers have complained that the teacherstudent ratio was very high with 1 : 60 and it should be reduced to 1 : 20.

Staff also seem to be satisfied with the educational facilities provided for their children by the management. However, a few expressed the need for some assistance from the management in the form of scholarships.

G. Indebtedness and Co-Operative Credit Societies

In the course of interviews, indebtedness of workers in the Shipyard is enquired into Table 6.2 shows source-wise number and percentage of workers indebted. As per this table 94.57% of the skilled workers, 72.50% of semi-skilled workers and 94.44% of unskilled workers were indebted. Some of the workers have borrowed from more than one source. Majority

of skilled workers (79.84%) have borrowed from their provident fund account. This was followed by money lenders from whom 56.59% of skilled workers have taken loans. Nearly 52% have borrowed from the credit society. This trend more or less can be observed among the semiskilled workers also. As regards unskilled workers, an equal percentage – 83.33 – have borrowed both from provident fund account and from money lenders. The next source was credit society. Thus a large percentage of unskilled workers have resorted to borrowing money from money lenders, compared to other categories of workers.

The amount of per worker indebtedness has been calculated and shown in Table 6.3. Skilled workers on an average are indebted to the extent of Rs. 2,780.55; semiskilled Rs. 1,727.34 and unskilled Rs. 1,933.06. Thus their average amount of indebtedness was roughly equal to their five months pay. A further enquiry into sourcewise average amount of indebtedness shows, money lenders constitute an important source for all the three categories of workers. It may be noted here that the rate of interest charged by money lenders is very high and their terms of recovery are very onerous. Hence, with a view to provide liberal credit facilities to workers and staff the management has taken initiative in promoting two credit societies – one for the staff and the other for workers. The two co-operative societies give credit to its members at low rates of interest and help them to repay the amounts in easy instalments by way of recovery from their monthly wages/salaries with compulsory thrift deposit schemes. The management is rendering all assistance by giving free service of its officers as the ex-officio president, treasurer, of the Labourers' Co-operative Thrift and Credit Society and ex-officio president and director of the Staff Co-operative Society. Adequate accommodation for their offices is also provided.

Tables 6.4 and 6.5 show the progress made by the Hindustan Shipyard Labourers' Co-operative Thrift and Credit Society and the Hindustan Shipyard Staff Co-operative Society,²³ respectively. It is seen from Table 6.4 that the

23. The name has been subsequently changed to the Hindustan Shipyard Staff Co-operative Bank.

TABLE 6.2
NUMBER AND PERCENTAGE OF INDEBTED WORKERS

	Skilled			Semiskilled			Unskilled			Overall		
	Number of workers Indebted	Percentage of workers in total number of skilled workers	Number of workers Indebted	Percentage of workers in total number of semiskilled workers	Number of workers Indebted	Percentage of workers in total number of unskilled workers	Number of workers Indebted	Percentage of workers in total number of unskilled workers	Number of workers Indebted	Percentage of workers in total number of workers	Number of workers Indebted	Percentage of workers in total number of workers
Money Lenders	73	56.59	17	42.50	30	83.33	120	58.54				
Credit Society	67	51.94	8	20.00	19	52.78	94	45.85				
Provident Fund loan	103	79.84	18	45.00	30	83.33	151	73.66				
Other loans from employer	56	43.41	9	22.50	14	38.89	79	38.54				
Co-workers	20	15.50	6	15.00	8	22.22	34	16.59				
Others	3	2.33	7	17.50	—	—	10	4.88				
All sources	122	94.57	29	72.50	34	94.44	185	90.24				

TABLE 6.3
AMOUNT OF PER WORKER INDEBTEDNESS

Sources of Borrowings	Skilled			Semiskilled			Unskilled			Overall		
	Total amount borrowed	Per worker indebtedness	Total amount borrowed	Per worker indebtedness	Total amount borrowed	Per worker indebtedness	Total amount borrowed	Per worker indebtedness	Total amount borrowed	Per worker indebtedness	Total amount borrowed	Per worker indebtedness
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Money Lenders	1,02,300	1,401.37	23,550	1,385.29	28,110	937.00	1,53,960	1,283.00				
Credit Society	58,350	870.90	5,165	645.63	10,350	544.74	73,865	785.80				
Provident Fund loan	77,935	756.65	10,488	582.67	15,666	522.20	1,04,089	689.33				
Other loans from employer	73,927	1,320.13	6,700	744.44	10,688	763.43	91,315	1,155.89				
Co-worker	14,245	712.25	2,090	348.33	2,950	368.75	19,285	567.21				
Others	12,470	4,156.66	2,100	300.00	-	-	14,570	1,457.00				
All sources	3,39,227	2,780.55	50,093	1,727.34	67,764	1,993.06	4,57,084	2,470.72				

TABLE 6.5
PROGRESSIVE STATEMENT OF THE HINDUSTAN SHIPYARD STAFF CO-OPERATIVE BANK LIMITED

Year	Num- ber of mem- bers	Paid-up share capital	Loans disbursed to mem- bers	Amount of loan out- standing against members	Deposits			Net profit or loss
					Recur- ring	Thrift	Fixed Savings	
					Rs.	Rs.	Rs.	Rs.
1957-58	568	66,565	3,06,192	2,46,024	2,700	22,077	29,617	+ 5,498
1958-59	654	1,00,590	5,88,127	3,99,534	5,473	63,803	17,861	+ 5,766
1959-60	775	1,26,840	7,26,998	4,85,780	3,945	95,414	42,534	+ 9,844
1960-61	838	1,44,805	8,08,233	5,42,262	4,689	1,39,591	82,848	+ 14,357
1961-62	839	1,51,830	8,83,469	5,77,712	8,662	1,86,484	89,828	+ 13,000
1962-63	869	1,63,770	9,28,042	6,30,501	7,470	2,35,293	1,46,420	+ 9,623
1963-64	915	1,73,370	9,81,900	6,77,480	9,986	2,71,602	1,92,780	+ 14,764
1964-65	994	2,29,675	13,42,132	9,17,328	8,086	3,21,017	1,81,620	+ 17,935
1965-66	1,051	2,67,420	13,11,674	10,25,979	10,130	3,83,680	2,07,766	+ 30,870
1966-67	1,071	2,76,625	15,90,229	10,68,914	10,340	4,39,399	2,75,420	+ 33,288
1967-68	1,058	2,82,225	16,19,915	11,43,760	14,090	5,11,455	1,52,904	+ 29,776
1968-69	1,052	2,99,255	20,33,587	11,92,701	9,475	5,79,010	3,09,929	+ 32,955
1969-70	1,029	3,00,375	NA	12,14,911	8,816	6,28,078	3,53,943	+ 26,820
1970-71	1,034	3,80,020	31,19,000	15,18,901	26,111	7,74,232	5,01,185	+ 31,271

members of the Hindustan Shipyard Labourers' Co-operative thrift and Credit Society Limited increased from 1,129 in 1956-57 to 2,110 in 1970-71. The loans disbursed to members has increased from Rs. 2.03 lakhs in 1956-57 to Rs. 11.35 lakhs in 1970-71. The net profit has also increased from Rs. 1,924.39 in 1956-57 to Rs. 34,974.20 in 1970-71.

The Hindustan Shipyard Staff Cooperative Society was started on the 5th May, 1958. The number of members at the beginning of the year 1957-58 was 568 with a paidup share capital of Rs. 0.67 lakhs. At the end of 1970-71 the members on roll rose to 1,034 with a paid-up capital of Rs. 3.80 lakhs. The amount of loans disbursed to members has gone up from Rs. 3.06 lakhs to Rs. 31.19 lakhs during the period 1957-58 to 1970-71 respectively. Loans outstanding against members have increased from Rs. 2.46 lakhs in 1957-58 to Rs. 15.19 lakhs in 1970-71. The instalments of loans disbursed to members are being recovered every month by the management from the salaries of members. As such, there is no difficulty at all to recover the loan instalments from the members and this guarantee of prompt collection of monthly instalments contributes to a very great extent to the successful working of the society. The bank earned a net profit of Rs. 31,271 for the year 1970-71 and 6½% was declared as dividend and the same was distributed to the share holders. The Board of Management of the society consists of nine directors of whom two are nominated by the management of the Shipyard and the other seven are elected by the General Body on Zonal System. Of the two directors nominated by the Shipyard, one employee of the rank of an officer is to be the Ex-officio President and the other member is to be the Ex-officio Director.

Among the selected group of workers 46 83% were members of the credit society; semiskilled were less compared to skilled and unskilled workers. Among the selected group of staff about 69.84% were members of the Cooperative Credit Society. More than 80% of G3 group were members of the society.

The general opinion of workers and staff regarding the functioning of the respective Cooperative Credit Societies was good. 51.94% of skilled, 20% of semiskilled and 52.78% of unskilled workers have borrowed from credit society and their

average amount of indebtedness (due to the society) was Rs. 870.90, Rs. 645.63 and Rs. 544.74 respectively (Tables 6.2 and 6.3). A large percentage of staff (67%) could get loans from their society than in the case of workers. There was not a single case where, the staff have tried for loan but did not get. There were others who never tried and the reason may be that they were not the members of the credit society or they were not in need of money or they had other sources to look to.

H. Recreation:

Man's physical and mental conditions are not only influenced by his diet, but also by his recreational habits and opportunities. In many organisations there exist carefully planned and guided programmes of recreation. Such programmes encourage development of an ingroup feeling among employees, reduce mental and physical strain, encourage regular relaxation and help to develop the fuller personality²⁴. Each of these can be developed as wholly organisational, involving the employees of the company only—or they can be community related. Any one or both whichever is suitable can be organised. But recreational activity should include both cultural and athletic activities.

The Shipyard provides recreational activity for its employees during free work time. It has a sports club which was organised in 1943 under Scindia Management. The club was renamed as The Hindustan Shipyard Recreational Club in 1954. The rules and regulations were redrafted under the revised constitution. Since the activities of the club are growing from year to year, the management has provided a building for the club and besides this, a play ground and two tennis courts with flood-lights are also provided. The indoor games are conducted in a spacious building. The fine arts section of the club conducts entertainments periodically. Besides extending the above facilities, the management provides an annual contribution of Rs. 2,500/- to the club. All the employees are eligible for membership. About 900 employees have become members of this club. Those drawing a basic salary of Rs. 400/- or less pay

24. Dale Yoder, *Personnel Principles and Policies*, Asia Publishing House, Bombay, 1960, p. 16

a membership fee of Rs. 0-70 per month (for members residing in town it is only Rs. 0-40) and those with basic salary of Rs. 400-00/- or above per month are required to pay Rs. 1-30 per month (for members of town only Rs. 0.65).

The annual expenditure incurred by the management towards the provision of recreation facilities mentioned above, has increased from Rs. 1,681 in 1957-58 to Rs. 28,910 in 1970-71, leading to an increase in per capita expenditure under this head from Rs. 0.36 to Rs. 5-44 during the period under study (Table 6.1).

In order to have an idea about how the leisure time was spent by workers and staff outside the yard, the selected groups were interviewed. It is learnt that very few workers and staff participate in sports. Out of 205 workers interviewed only 7.32% spent some time in games and sports and out of 63 staff members only 20.63% participated. 17.56% of workers and 30.16% of staff said they spend some of their leisure time in reading. 56.59% of workers and 74.60% of staff said that they go twice or thrice to the pictures in a month in order to have some type of entertainment. 57.56% of workers and 65.08% of staff spend some of their leisure time in religious activity. Many workers and staff had their own ways of spending time as many said they spend their time mostly at home with their children, attend to their house-hold work like shopping, or in visiting relatives, etc., and as such they were left practically with no time for the above listed activities.

A ladies' club with the wives of the employees as members, is also functioning and does a lot of work by way of providing recreational, social and cultural activities to families residing in the colony.

Employee Welfare Committee :

The need for some organised effort to promote the welfare and improve the economic and social conditions of the family members of the employees was keenly felt. Accordingly, a voluntary organisation comprising of the lady members of the employees' families—"Hindustan Shipyard Employee Welfare Committee—came into existence. This committee headed by the wife of the Managing Director, proposes to initiate and

undertake all social, economic and welfare measures aimed at improving the condition of the family members of employees of the shipyard and to provide necessary amenities and afford relief as far as possible. The objectives of the Welfare Committee are

- to provide welfare and improve the living conditions of the family members of the employees of the Shipyard ;
- to grant tuition fee and small amounts towards purchase of books for the deserving children of employees of the Shipyard ;
- to run milk distribution centres in the colony ;
- to give vocational guidance to the women folk of employees ;
- to visit hospitals where the members of the families are hospitalised or sick ;
- to promote sense of hygiene and health among the family members in the colony ;
- to find ways and means of securing costly medicines for the employees ;
- to promote elementary education for the children of employees ;
- to encourage community work by imparting instruction in tailoring, laundry and other small-scale industries ;
- to promote good relations and a spirit of mutual help and service among the family members ;
- to render financial assistance by sanctioning loans to the needy ;
- such other activities decided by the Managing Committee from time to time.

An amount of Rs. 500/- has been distributed for medicines to the deserving employees by the committee. The committee has given financial assistance to the tune of Rs. 200/- for purchasing books to the deserving children. The committee has also assisted in distributing sweets and fruits to the jawans going to the war front. Care food is being supplied to the school children with the active assistance of the Welfare Committee. Under the auspices of this committee a scheme is introduced by virtue of which the employees can get loans at reasonable interest from the local bank so as to clear-off their

loans borrowed at abnormal interest from outside parties.

A Welfare Centre is also opened in the colony by the State Government for the benefit of colony residents. Regular training in tailoring is being arranged for the benefit of the families of colony residents. Regular film shows are also arranged. Facilities for indoor and outdoor games are also provided by the centre for the benefit of the colony residents. A library is also attached.

Transport

The management of the Hindustan Shipyard, in order to facilitate its workers residing in town to cross the channel arranged ferry service free of charge till the 30th September 1971. After the discontinuation of the ferry, it commissioned its own landing crafts. In addition the management has arranged launches and rowing boats for the monthly paid staff and provides buses and cars to the officers at subsidised cost. Further the children of the employees are provided with transport facilities to attend the local educational institutions on concessional payment. Amenity trips to town are provided by the management for the convenience of the residents of the colony. The total amount spent on transport has increased from Rs. 0.23 lakhs in 1957-58 (consisting of ferry charges) to Rs. 4.65 lakhs (consisting of ferry charges and expenditure on launches boats, motor cars and vans). This resulted in the increase of per capita expenditure on transport from Rs. 5.08 to Rs. 87.47 during the period.

I. Retirement Benefits

These benefits comprise gratuity, pension and provident fund. Gratuity is a lumpsum payment made to worker or to his heirs by the company on termination of his services due to retirement, retrenchment or death. The practice of paying gratuity in addition to provident fund is deeply rooted in the Indian system. Generally, the gratuity scheme covers, permanent employees who have put in a continuous service for a period of 10 to 15 years, though some schemes have much lower limits.

In accordance with the decision of the Government of

India a scheme of gratuity has been introduced with effect from the 1st September 1966, in respect of employees in the Hindustan Shipyard. As per this scheme, gratuity is granted for good, efficient and faithful service to whole-time employees of the company in case of (a) discharge or abolition of post, (b) permanent incapacity due to bodily or mental infirmity, (c) superannuation, (d) retirement after 30 years' qualifying service (except in case of death in whose case gratuity will be admissible only after five years of qualifying service). Gratuity is equal to 15 days' emoluments for each completed year of service subject to a maximum of 15 times of the monthly emoluments or Rs. 24,000/- whichever is less. In case of death, gratuity will be paid at different rates.

Gratuity is not admissible to an employee who resigns from service (voluntary retirement after 30 year qualifying service would not constitute resignation) or whose services are terminated for misconduct, insolvency or inefficiency.

The Employees' Provident Fund Act 1952, applies to the whole of India except the state of Jammu and Kashmir. A uniform rate of contribution of eight per cent of emoluments (basic pay plus dearness allowance) to provident fund is adopted in the Hindustan Shipyard with effect from the 1st September 1966 instead of the $6\frac{1}{4}\%$ of total emoluments. An equal contribution will be made by the management. The employees are given loans against their provident fund balances.²⁵

In many developing countries, provident fund, no doubt has been the most popular form of social protection. However, because of its deficiencies, there was a move in favour of the transformation of the provident fund scheme into a pension scheme. The study group on social security set up by the Government of India recommended conversion of the employees' provident fund into old age pension, survivorship and invalidity and pension schemes along with its merger with the ESI scheme.

In the case of the Shipyard the family pension scheme-cum-

25. This facility is further liberalised recently so as to enable workers and staff to borrow a number of times under the scheme even without clearing off the arrears of their previous loan completely.

life assurance applies to those employees who are exempted from Provident Fund on the 28th January 1971. The member of the family pension scheme ceases to be its member on attaining the age of 60 years and a minimum of two years' contribution is prescribed for qualifying for the scheme. The member's contribution is equivalent to $1\frac{1}{6}$ th per cent of his total emoluments and an equal amount is contributed by the employer to the fund. The Central Government also contributes at the rate of $1\frac{2}{3}$ % of the total emoluments of the members and credits the contribution to the family pension-cum-life assurance fund in the public accounts of the Government of India.

The annual expenditure under retirement benefits has increased from Rs. 3.42 lakhs in 1957-58 to Rs. 40.70 lakhs in 1970-71. This resulted in an increase in per capita expenditure from Rs. 72.59 to Rs. 766.15 during the period (Table 6.1).

FROM CONFLICT TO COOPERATION

A. Dynamics of Conflict

A society which provides for rising standard of human satisfaction accompanied by a low level of coercion, but a high degree of harmony between different groups is sought to be established as an ideal one. However, among many troublesome-problems of the modern industrial society, relations between labour and management are conducted not in a vacuum but in a specific economic and social context which exerts a powerful influence on the outcome.¹

On the one hand the management is largely concerned in maintaining the daily flow of work in the enterprise and in protecting operations from influences that will interrupt or disrupt the ongoing activities. And on the other hand it is a fact that many industrial workers in our society are not fully satisfied with the rewards and the conditions of their employment and with their lives as wage earners. Even among those who are not actively dissatisfied, larger number believe that they can improve their positions through organised pressures as well as by individual efforts. This discontent and its aspirations breed conflict.

The organised efforts of management and labour in protecting

1. Arthur Kornhauser, Robert Dubin, Arthur M. Ross, "Industrial Conflict—Problems and View Points," *Industrial Conflict*, McGraw Hill Book Co. Inc., 1954, London, p. 186.

their interests, in course of time, made them special interested groups with selfish character in our society. And in spite of "heavy accent in recent years on common goals and on the virtues of industrial peace and harmony, the pursuit of opposed aims continued to cause strife."² With the growth of mass scale production, massive and integrated technology, stronger trade unions and employers' resistance, industrial strife has been further intensified.

Strike has become an important means of expressing discontentment and it is an indicator of existence of conflict between the two groups. Probably the basic explanation for this importance lies in the 'overtness of the strike.' "Glaring and palpable, it thrusts itself rudely above the surface of society. Although not the most significant source of economic loss, it is certainly the most conspicuous."³ But strikes are not the only expression of industrial discontent.⁴ In fact, in most countries the strike activity today is well below the level in earlier decades; and in some of the most strongly unionised countries resort to strikes is approaching the vanishing point.⁵

But conflict being normal and natural, it has been argued, a healthy society should wherever feasible recognise it frankly for what it is and it may be permitted to come to the surface where some kind of resolution can be achieved. This suggests that constant efforts will have to be made to locate and resolve the conflict so as to create and preserve smooth working relationship. This in turn necessitates the development of acceptable mechanism of compromises, accommodation and adjudication to settle all disagreements.

2. Ibid, p. 3.

3. Ibid, p. 8.

4. Other means of expression of discontentment and conflict are labour turnover, absenteeism, tardiness, low morale, indiscipline, etc.

5. Lloyd G. Reynolds, op. cit., p. 270. However, countries like Italy, France and India, where unions are relatively weak, have had high proportion of union members involved in strikes. Three reasons have been mentioned for this trend—first, employers have developed more sophisticated policies and more effective organisation. Second, the state has become more prominent as an employer of labour, economic planner and supervisor of industrial relations. Third, in many countries the labour movement has been forsaking the use of the strike in favour of broad political endeavours. (Arthur M. Ross and Paul J. Hartment, *Changing Patterns of Industrial Conflict*, New York, John Willey Sons Inc., 1960, p. 42.

Sources of conflict and grievance spring from basic human wants and expectations. These wants and expectations of industrial workers differ in particular plants or industries, depending upon the past practices and traditions and upon the social and economic environment. Today, the managements are concerned with the areas of conflict, and in order to get effective results in this area they have developed many techniques of personnel administration primarily with the basic objective of developing harmonious relations. These techniques may produce valuable results in terms of health, welfare, and advancement of employees and it may as well contribute to productivity. But this may not succeed completely in eliminating conflict, and at best it could be reduced to a certain extent.

It is important to see that co-operation is a genuine possibility in every union-management relationship. The role of collective bargaining is to be stressed in this context. Collective bargaining is a great social invention that has institutionalised industrial conflict and helped in minimising the outbreak of strikes. Collective relations between management and union are grounded in the conscious and deliberate use of power and force. "Power is marshalled and force is used to gain the immediate ends of the contending parties as they are formalised in the bargaining agreement."⁶

With the growth of a massive and integrated technology, stronger and more inclusive organisations and more effective means of communication, the destructive potentialities of industrial conflict no doubt have greatly increased; but the real impact has been kept well within bounds. Doubtless this is to be explained by the creative development of collective bargaining, modern social legislation and other means of handling the issues in controversy. A great deal of evidence testifies that orderly procedure for dealing with conflict have been on the increase and that resort to violence has sharply declined.⁷ Further every organised group in course of time seeks to orient

6. Arthur M. Ross, "The Natural History of the Strike," *Industrial Conflict*, Chapter 2, op. cit., p. 44.

7. Arthur Kornhauser, "The Undetermined Future of Industrial Conflict," *Industrial Conflict*, op. cit., p. 44.

itself significantly towards the larger society within which it operates. Each group fits its collective action to the range of acceptable behaviour of the society.

B. Industrial Strife in India

The role of the state intervention in industrial relations underwent a great transformation throughout the world. The labour policy of the Government of India before independence was one of neutrality and with the attainment of independence the Government has devoted considerable attention, through labour legislation and disputes settlement machinery, to the aspirations and grievances of industrial workers.⁸ Several reasons can be identified for this change. Among them are the need for fulfilment of social and economic objectives to achieve an egalitarian society, the expansion of state ownership and control of industry, the weak trade union movement and its growth along political lines and the indifference of employers.⁹ Further the labour policy of the Government was designed to steer clear of all ideological and class conflicts and keep the two arms of production—labour and capital—contented. Its main object is to foster mutual respect among employers and workers as well as the realisation that they are equal partners in a joint enterprise and that by serving the country they serve their own interests.

The most important legislative enactment after the independence was the Industrial Disputes Act of 1947.¹⁰ It empowered the Government to refer any dispute or difference to adjudication by industrial tribunal. Strikes are forbidden during the pendency of conciliation or arbitration proceedings and during the period when an award is in force. The Act also provided for the establishment of works committees in all industrial undertakings employing 100 workers or more. Until 1952 the characteristic pattern of Indian industrial relations had called

8. Charles A. Myers and Subbaiah Kannappan, *op. cit.*, p. 19.

9. Puneekar, S.D., "Aspects of State Intervention in Industrial Relations in India—An Evaluation," *Industrial Relations and Economic Development*, Edited by Arthur M. Ross, Macmillan & Co. Ltd., 1966, p. 27.

10. The Act has been amended several times and the most important amendment was in 1956 providing for a three-tier machinery for adjudication of industrial disputes.

for compulsory intervention by the Government to prevent strikes.¹¹ When Shri V. V. Giri became Minister of Labour in 1952, he favoured collective bargaining and made something of a mission of championing the method of collective bargaining in preference to the method of Government arbitration and pursued it so widely that it was soon referred as 'Giri's approach.'¹² This approach was however, rejected by the trade unions in India on the ground that they were too weak to support long strikes and free collective bargaining would only benefit the employer and that the Government would lose control of the labour situation. The general opinion in India has been that unfettered collective bargaining would not be beneficial to the best interests of the economy. The result is that relations between employees and employers are governed by a complex set of labour legislation.

The Hindustan Shipyard also by and large is following the procedure laid down in the Industrial Disputes Act of 1947. The Labour Union and the Staff Association put forward their point of views before the management and whenever differences arise and cannot be resolved through collective bargaining, the matter is referred to conciliation. There were also cases when the disputes were referred to adjudication. However, it was observed that whenever the conciliation machinery failed, the union issued a strike notice to the management, with respective copies to the Government and with the intervention of the latter, in many cases, settlement was reached.

C. Analysis of Demands

The nature of labour-management relations is very much influenced by the demands put forward by the union from time to time and the manner in which they were disposed off by the management. While the demands represent the dissatisfactions and desires of workers, their disposal indicates the attitude and promptness of the management in dealing with the issues of labour. Hence, an analysis of all the demands that have been

11. William H. Friedland, *op. cit.*, p. 51.

12. Van D. Kennedy, *The Conceptual and Legislative Framework of Labour Relations in India*, Institute of Industrial Relations, California, Reprint No. 114, 1958, p. 495.

raised from time to time by the labour union and the way they were disposed off is highly essential to understand the nature and the course of relations between the management and labour. In fact, this material constitutes the crux of the entire literature on industrial relations in any organisation. Realising this, an attempt has been made to collect information on all the demands (raised by the Hindustan Shipyard Labour Union) with regard to their nature and disposal for the period 1957 to 1971. This information has been classified and shown in Table 7.1. All demands raised by the Hindustan Shipyard Labour Union have been classified into nine groups—(i) wages and allowances; (ii) work assignments and work-loads; (iii) leave, holidays and working hours; (iv) working conditions; (v) recruitments, promotions, gradations and transfers; (vi) suspensions, discharges and discipline; (vii) union issues; (viii) welfare measures; and (ix) miscellaneous. The disposal of the demands have been classified into eight forms; (i) accepted; (ii) partially accepted; (iii) rejected; (iv) agreed to consider; (v) no reply/no action; (vi) referred to third party; (vii) outside the purview of management; and (viii) others. The entire period is divided into three sub-periods, viz., 1957-61, 1962-66 and 1967-71 and the totals are shown in the end.

During the 15 year period, wages and allowances constitute the major cause under which 20.80% of the total demands have been raised. This was followed by welfare measures accounting for 17.49%. Next follows recruitment, promotion, gradation and transfers which accounted for 14.52%. This conforms with the general trend of labour demands in Indian industry. It is important to note that largest number of demands (34.65%) have been rejected by the management. Only 26.41% of the total demands have been accepted with another 9.24% partially accepted. Roughly 18% of the total demands relating to wages and allowances have been accepted by the management. This percentage was slightly higher with regard to all other groups. It is heartening to note that a large proportion of union issues had been acceded to by the management. It may be noted from this table that the total number of demands was maximum during the period 1967-71. It was further observed that the union placed a large number of demands (95) in 1968. But only

19 demands—nearly 20% have been accepted by the management; another 5% have been partially accepted. Thus three-fourth of the total demands have been either rejected or not settled in favour of workers. This situation has been further intensified with the new demands raised in the first four months of 1969 and ultimately resulted in a major strike lasting for 27 days. This underlines the need for prompt disposal of the demands by the management as a prerequisite for maintaining cordial relations with labour.

D. Analysis of Strike Activity

All the above demands which have been negotiated did not result in strikes. But the causes of strikes are those issues on which the negotiations failed. Thus complete work stoppages are not only the dramatic expressions of industrial conflict, but they also indicate the failure of collective bargaining.

Table 7.2 has been prepared showing the number of strikes (departmental/yard-wide strikes), number of workes involved, number of mandays lost in total and also per strike and amount of wages lost (in rupees) in the Hindustan Shipyard for the years 1942 to 1971. The era of strikes in the Shipyard began from the 4th July 1944 when 136 workers went on strike for one day demanding the grading of carpenters, even when management assured them that the grading would be done in one or two days. This strike resulted in a loss of 136 mandays. From the above table it is seen that in the entire period of 30 years there were 48 strikes. But the strike activity in the Shipyard has been spread out unevenly throughout the period. Upto 1969, there were strikes continuously except during the years 1949, 1955, 1959, 1962 and 1964. In most of the years there was only one strike. There were five strikes in each of the years 1951 and 1961. The number of mandays lost (2,31,290) and the amount of wages lost (Rs. 8,55,378) were maximum during the years 1947 and 1969 respectively. In both the years 'wages and allowances' happened to be the main issues resulting in major work stoppages. The Shipyard was free from strikes during 1970 and 1971.

A study of duration of each strike conducted during the period 1942-71 presented in Table 7.3 shows the intensity of

TABLE 7.2

ANALYSIS OF STRIKES - 1942 TO 1971

Year	Number of Strikes		Number of workers involved	Total number of mandays lost	Average number of mandays lost per strike	Amount of wages lost Rs.
	Total	Departmental				
1944	1	1	136	136	136	175
1945	2	-	2,892	9,546	4,773	11,000
1946	1	-	2,370	35,550	35,550	30,000
1947	4	2	5,485	2,31,290	57,823	4,69,975
1948	1	-	3,465	433	433	1,100
1950	4	1	10,659	4,946	1,237	14,665
1951	5	-	15,998	7,509	1,502	18,100
1952	1	-	3,292	6,586	6,586	19,758
1953	1	-	2,863	49,031	49,031	59,729
1954	1	1	249	1,154	1,154	4,760
1956	3	1	6,076	1,700	567	6,146
1957	4	-	9,427	1,978	495	7,666
1958	2	2	572	5,300	2,650	24,223
1960	1	-	2,613	1,279	1,279	5,785
1961	5	2	10,680	75,497	15,099	3,57,501

1	2	3	4	5	6	7	8
1963	1	1	-	243	255	255	1,250
1965	3	2	1	3,795	1,165	388	7,119
1966	2	-	2	5,550	19,659	9,829	1,22,393
1967	1	-	1	3,595	462	462	2,978
1968	4	3	1	3,346	962	241	8,625
1969	1	-	1	3,773	82,090	82,090	8,55,378
Total	48	16	32		5,36,528		20,28,326

NOTE: There were no strikes during 1942, 1943, 1949, 1955, 1959, 1962, 1964, 1970 and 1971.

TABLE 7.3
STRIKES BY DURATION

Duration	1942-46		1947-51		1952-56		1957-61		1962-66		1967-71		Total	
	N	P	N	P	N	P	N	P	N	P	N	P	N	P
A day or less	2	50.00	10	71.43	3	50.00	8	66.67	4	66.67	5	83.33	32	66.67
More than a day and upto five days	1	25.00	1	7.14	2	33.33	1	8.33	2	33.33	-	-	7	14.58
More than five days and upto 10 days	-	-	2	14.28	-	-	-	-	-	-	-	-	2	4.17
More than 10 days and upto 20 days	1	25.00	-	-	1	16.67	3	25.00	-	-	-	-	5	10.41
More than 20 days and upto 30 days	-	-	-	-	-	-	-	-	-	-	1	16.67	1	2.09
More than 30 days	-	-	1	7.15	-	-	-	-	-	-	-	-	1	2.08
Total	4	100.00	14	100.00	6	100.00	12	100.00	6	100.00	6	100.00	48	100.00
	(8.33)		(29.17)		(12.50)	(25.00)	(12.50)	(12.50)	(12.50)	(12.50)				

N = Number; P = Percentage.

(Figures within brackets indicate percentages.)

strike activity in the Shipyard. It could be seen from this table that out of the total number of 48 strikes conducted during the period 1942–71, 32 strikes—i.e., 66.67% of the total number—were for a duration of a day or even less. These work stoppages were mostly concerned with union issues like the workers asking for permission to attend the union meetings during the working hours – the rejection of which resulted in the walk-out by the workers. The second major cause which resulted strikes for a day or less was dispute over the work assignment and work-loads. Seven strikes, i.e., 14.58% were for a duration of more than one day and less than five days. The causes for many of these strikes being discharge, suspension, reinstatement, and work-assignments and work-loads. Strikes for more than five days and less than 20 days account for 14.58% and they were generally for promotion, upgrading, transfers, wages and dearness allowance. The two strikes – one for 105 days in 1947 and the other strike for 27 days in 1969 were the result of workers demanding mainly revised wage structure and enhancement of allowances.

Table 7.4 shows nine indicators of the incidence of strike activity in the Shipyard for the period 1957 to 1971. The number of workers involved and the number of mandays lost as a result of the strike activity have been taken mainly as the bases for calculating these indicators. The number of workers involved in strikes has been expressed as a percentage of the total strength of the concerned department (where the strike had taken place); total strength of the yard and union membership. Thus the degree of involvement in strikes has been calculated separately for departmental strikes and yard-wide strikes. It could be observed from the table that only in four years (during the period 1957 to 1971) departmental strikes had taken place and the degree of involvement was more than 60% with the exception of 1961. During the entire 15 year period, the Labour Union had organised yard-wide strikes in eight years in which the involvement of labour was reported to be above 66%. During the major strike of 1969 which was conducted for 27 days, 96.62% of total strength of workers had participated. These two measures thus clearly indicate that whenever a strike was organised – either departmental or yard-wide – a high degree of involve-

TABLE 7.4
INDICATORS OF STRIKE ACTIVITY

Year	Average number of workers on roll	Mandays scheduled to work	Mandays lost due to strikes	Workers involved as percentage of			Mandays lost due to strikes					Industrial Relations index
				TSD	TSY	UM	PP	PUM	PW	PMA	PMS	
1957	3,768	11,00,256	1,978	-	71.70	136.70	0.20	1.14	0.52	0.20	0.18	1.0020
1958	3,805	11,26,280	5,300	79.68	-	14.03	9.26	2.60	1.39	0.53	0.47	1.0053
1959	3,821	11,31,016	-	-	-	-	-	-	-	-	-	1.0000
1960	3,903	11,62,953	1,279	-	66.95	199.77	0.49	1.98	0.33	0.12	0.10	1.0012
1961	4,127	12,13,227	75,497	54.29	85.07	1017.11	7.07	359.51	18.29	7.03	6.22	1.0756
1962	4,124	12,10,724	-	-	-	-	-	-	-	-	-	1.0000
1963	4,224	12,40,200	255	NA	-	28.59	1.05	0.30	0.06	0.02	0.02	1.0002
1964	4,199	12,36,165	-	-	-	-	-	-	-	-	-	1.0000
1965	4,209	12,41,948	1,165	63.65	83.44	105.42	0.31	0.97	0.27	0.11	0.09	1.0011
1966	4,171	11,08,359	19,659	-	66.53	232.15	3.54	9.36	4.71	2.04	1.77	1.0208
1967	4,149	10,11,199	462	-	86.65	171.19	0.13	0.22	0.11	0.05	0.04	1.0005
1968	4,050	9,84,358	962	88.99	72.15	32.17	0.29	0.37	0.23	0.11	0.09	1.0011
1969	3,905	11,64,306	82,090	-	96.62	121.71	21.76	26.48	21.02	8.07	7.05	1.0878
1970	3,850	11,44,167	-	-	-	-	-	-	-	-	-	1.0000
1971	3,861	11,68,867	-	-	-	-	-	-	-	-	-	1.0000

TSD = Total Strength of the Department (Departmental Strikes); TSY = Total Strength of the Yard (Yard-wide Strikes); UM = Union Membership; PP = Per Participant; PUM = Per Union Member. PW = Per Worker; PMA = Per 100 mandays Available; PMS = Per 100 mandays scheduled to work.

ment was recorded.

The third indicator in this group was percentage of workers who are union members. It is quite revealing to note that in most of the years the number of workers involved in strikes had exceeded the number of union members. This indicates that some of the non-union members also participated in the strikes as they were equally concerned with the issues under dispute. It was only in 1958, 1963 and 1968 that the number who participated in the strikes were less than the number of union members. But it is to be noted in this context that in all these years mostly departmental strikes had been organised.

The second group of indicators as has already been mentioned above, relate to mandays lost due to strikes which are calculated per participant (in strike), per union member, per worker, per hundred mandays available and per hundred mandays scheduled to work. The number of mandays lost (due to strikes) per participant indicates the average duration of all the strikes conducted in the year, and the degree of staying power per worker. Table 7.4 shows that it was only during 1969 that average number of mandays lost per participant was 21.76.¹³ In all other years the average number of mandays lost per participant has been worked out at less than 10.

The second indicator under this group is the average number of mandays lost per union member. The importance of this index lies in understanding the degree of strike proneness and the degree of staying power of the union members. However, as it has already been observed, the number of strikers in most of the years was more than the union members, consequently the calculation of the average number of mandays lost per union member gets distorted with the mandays lost due to participation of non-union members. And it was not possible to find out the number of union members actually participated in each strike and the number of mandays lost as a result of this, either from the records of the management or of the union. However, the figures given in Table 7.4 give us a general idea regarding the union members involvement in the strike activity.

13. The difference between this average figure and the actual duration of the strike (27 days) can be explained by the slight variation in the number of participants in all these 27 days.

The third important indicator in this group is the number of mandays lost per worker in general. It could be seen from the Table 7.4 that during the years 1961 and 1969 a large number of mandays were lost accounting for 18.29 and 21.02 respectively. It may be noted here that in 1961 there were four yard-wide strikes and one departmental strike and in 1969, as already mentioned above, the major strike lasting for 27 days was responsible for the loss of maximum number of mandays per worker. In all the other years the loss was less than five mandays per worker.

The number of mandays lost per 100 mandays available was also calculated and shown in the same table. The term 'mandays available' refers to the estimated number of mandays scheduled to work minus the number of mandays lost due to absenteeism and accidents. It was only in 1961 and 1969 that more than 7% of total mandays available were lost due to strikes. In all the other years it was even less than 1% with the exception of 1966. The number of mandays lost due to strike activity has also been expressed as a percentage of mandays scheduled to work. The differences in the percentages given in this column and the earlier column indicates the relative role of strike activity in the loss of mandays. More than 6% of the mandays scheduled to work was lost due to strikes in 1961 and 1969.

With the help of total number of mandays available and the total number of mandays lost due to strikes the 'Industrial Relations Index' has been calculated¹⁴ and shown in the last column of Table 7.4. The significance of this index lies in enabling the reader to understand immediately the magnitude of the strike activity and the state of industrial relations in general. The lower the index approaching to unity, the less the number of mandays lost due to strikes and better the state of industrial relations. This column shows the index is at unity, in all those years namely 1959, 1962, 1964, 1970 and 1971 which were free from strikes. It was only in 1961 and 1969 the index was 1.0756 and 1.0878 respectively. In all the other

14. Industrial relations Index = $\frac{\text{Total Mandays Available (TMA)}}{\text{TMA} - \text{Mandays lost due to strikes}}$

years the index was approaching unity, indicating thereby less significant strike activity.

It will be quite interesting to compare the state of industrial relations prevailing in the Shipyard with that of public and private sectors in India. This comparative picture for the period 1962 to 1971 is shown in Table 7.5. In the year 1962, the number of mandays lost per worker was 0.07 and 1.08 in public and private sectors respectively. But in the Shipyard not even a single manday was lost in this year. In the next two years also, i.e., 1963 and 1964 industrial relations in the Shipyard were relatively more peaceful and congenial than they were in public and private sectors. In 1965 the number of mandays lost per worker in the yard (0.27), was less than that of private sector (0.95). But in the year 1966 mandays lost per worker (4.71) in the Shipyard were very much high, compared to public and private sectors. However, this was due to the political agitation conducted in the state demanding the location of the fifth steel plant at Visakhapatnam. In 1967, the situation was fully under control and the number of mandays lost per worker was less than the private and public sectors. The major strike conducted in 1969 was mainly responsible for the loss of the largest number of mandays per worker (21.02) in the Shipyard in that year. In the next two years, i.e., 1970 and 1971 the Shipyard was free from strikes. Thus with the exception of 1966 and 1969 the state of industrial relations, as measured by the number of mandays lost per worker during the period of 10 years under study was favourable relative to the public and private sectors.

The strike activity in the Shipyard is further analysed in Table 7.6 as per the causes, with a view to find out which cause was mainly responsible for a large number of strikes and for a large percentage of mandays lost. However, it may be noted here the causes of strikes are not so important as the reason for the failure of negotiation. In other words the important thing to investigate is not what the issue was, but why the parties were unable to reach in agreement on it. It will be interesting and at the same time highly useful to investigate into the circumstances under which the agreements between the parties became impossible. Thus, the process of negotiations

TABLE 7.5

MANDAYS LOST PER WORKER

Year	Hindustan Shipyard	Public* Sector	Private* Sector
1962	—	0.07	1.08
1963	0.06	0.03	0.55
1964	—	0.03	1.25
1965	0.27	0.08	0.95
1966	4.71	0.14	1.84
1967	0.11	0.26	2.19
1968	0.23	0.20	2.34
1969	21.02	0.14	2.67
1970	—	0.20	2.76
1971	—	0.21	2.11

*Source : Indian Labour Statistics, 1973.

and the real intentions of the parties are to be carefully examined to spell out any meaningful suggestions to reduce the volume of strike activity. However, as this information was not available either from records of the management or from the records of the union no attempt could be made on the above lines.

The causes of all strikes conducted in the Shipyard during the period 1942-71 have been classified into 10 groups namely wages and allowances; work assignment and work-loads; promotions, gradations and transfers, suspensions, discharges and reinstatements; union issues; holidays; long standing demands; miscellaneous; political and extraneous causes; and reasons not specified. The entire period of 1942 to 1971 has been divided into six sub periods namely, 1942-46, 1947-51, 1952-56, 1957-61, 1962-66 and 1967-71.

Maximum number of strikes--11 was conducted in respect of issues relating to union matters and work assignments and work-loads. Although the number of strikes in respect of wages and allowances was only six, the number of mandays lost accounted for more than 60%. This indicates strikes of longer duration were organised to achieve demands relating to

TABLE 7.6

ANALYSIS OF WORK STOPPAGES - CAUSE-WISE

	1942-46		1947-51		1952-56		1957-61		1962-66		1967-71*		Total
	NWS	NML	NWS	NML	NWS	NML	NWS	NML	NWS	NML	NWS	NML	NWS NML
W a g e s and allowances	1	35,550 (78.59)	2	2,30,187 (94.28)	1	6,586 (11.26)	1	838 (0.99)	-	-	1	365 (25.63)	6 2,73,526 (60.19)
W o r k assign-ments and work-loads	-	-	-	-	2	1,034 (1.77)	4	6,664 (7.92)	1	408 (1.94)	3	597 (41.93)	11 8,703 (1.92)
P r o m o t i o n s, gradations and transfers	1	136 (0.30)	1	1,488 (0.61)	1	1,154 (1.97)	1	687 (0.82)	-	-	-	-	3 3,465 (0.76)
S u s p e n s i o n s, discharges and reinstatements	1	9,000 (19.90)	1	371 (0.15)	-	-	-	-	1	403 (1.91)	-	-	3 9,774 (2.15)
Union issues	1	546 (1.21)	6	4,937 (2.02)	-	-	1	379 (0.45)	2	1,733 (8.22)	1	462 (32.44)	11 8,057 (1.77)
Holidays	-	-	1	3,425 (1.40)	-	-	1	3,915 (4.65)	-	-	-	-	2 7,340 (1.62)
L o n g standing demands	-	-	1	3,122 (1.28)	1	666 (1.14)	1	69,380 (82.56)	-	-	-	-	3 73,168 (16.10)

Miscellaneous	-	-	1	343	-	-	-	-	-	1	343
				(0.14)							(0.07)
Political and	-	-	1	305	-	3	2,191	1	18,280	-	5
extraneous causes				(0.12)			(2.61)		(86.72)		20,776
Reasons unspecified	-	-	-	-	1	49,031	-	1	255	-	2
						(83.86)			(1.21)		49,286
Total	4	45,232	14	2,44,178	6	58,471	12	84,054	6	21,079	5
		(100.00)		(100.00)		(100.00)		(100.00)		(100.00)	

NWS = Number of Work Stoppages; NML = Number of Mandays Lost.

* This period excludes the major strike conducted in 1969 in which 17 demands were placed before the management. This resulted in a loss of 82,090 mandays.

wages and allowances. If the mandays lost on account of long-standing demands (which also include demand for wages and allowances) are also included the percentage of mandays lost on account of wages and allowances will reach 76%. As it could be seen from the table, one strike each has been conducted in respect of first five groups of causes. However, 'union issues,' accounted for a number of strikes. But all these strikes were of very short duration.

During the period 1942–44, it is observed that 78.59% of mandays were lost due to wages and allowances and 19.90% of mandays were lost due to suspension, discharges and reinstatements. During the period 1947 to 1951, it is again observed that the maximum number of mandays were lost (94.28%) for wages and allowances. Other causes resulted in less than 6% of the total number of mandays lost. The number of strikes as well as mandays lost were maximum with 14 and 2,44,178 mandays respectively in this period. It is interesting to note that during this period the Labour Union conducted a major strike lasting for 105 days demanding higher emoluments. This strike was so far the first in the history of the Hindustan Shipyard Labour Union. Unspecified causes resulted in 83.86% of the mandays lost; and wages and allowances resulted in only 11.26% of the mandays lost during the period 1952–56.

During the period 1957 to 1961 the maximum percentage of mandays lost (82.56%) was for long standing demands. Other causes resulted in only 17.44% of mandays lost. During 1962–66, six strikes were conducted resulting in a loss of 21,079 mandays. Political and extraneous causes—particularly political agitation for the steel plant—made workers to go on strike for four days. This accounted for 86.72% of the total mandays lost during the period. But for this political agitation the environment was peaceful and there were only a few departmental strikes.

During the period 1967–71, the maximum percentage of mandays lost were due to disputes over work assignments and work-loads, i.e., 41.93%. This was followed by union issues and wages and allowances which accounted for 32.44% and 25.63% respectively. It may be noted that this period excludes the major strike conducted in 1969 in which 17 demands were included in the strike notice. This strike lasting for 27 days

ranks second among the strikes organised by the Labour Union.

E. Analysis of Major Strikes

The history of strikes in any organisation reveals certain major strikes which happen to be the causes and consequences of prominent trends in the course of labour relations. An analysis of these major strikes would help in understanding and identifying the major influences which worked at different periods of the entire history of labour relations in that organisation. Surely this would enable the parties in formulating appropriate policies and decision relating to labour relations.

In the Shipyard, during the entire period of 30 years, seven major strikes can be identified (Table 7.7) out of the total number of 48 strikes. The magnitude of the effect of these seven strikes can be understood by the number of mandays lost, duration of the strike and the number of workers who actually participated in each of these strikes. In all these major strikes, the participation of workers was above 85%. It is needless to say that all these seven strikes were organised throughout the yard. The number of mandays lost as a result of these seven strikes accounted for 91.79% of the total number of mandays lost in the Shipyard in the entire period of 30 years. Further, these strikes resulted in the closure of the entire yard for about 203 days. One can easily understand from these figures the huge loss of production, increase in costs (due to fixed overheads), decline in morale and productive efficiency of workers. This naturally suggests that if both the management and the union exercised some restraint and adjustability in their dealings perhaps it would have reduced the incidence of strike activity and promoted cordial relationship between the two groups.

The first major strike was organised by the workers in September 1945 as a protest against the 15 days' notice of discharge issued to 666 workers on instruction from the Director General of Shipbuilding and Repairs to cancel all the remaining work on the barges as well as tugs. 85.71% of the total workers have participated in the strike. Although the

TABLE 7.7
MAJOR STRIKES (1942-71)

Year	Duration of Strike (in days)	Percentage of workers participated to the total number of workers	Number of mandays lost	Percentage of mandays lost to mandays scheduled to work	Percentage of mandays lost to total mandays lost during the period 1942-71
1945	6	85.71	9,000	1.43	1.67
1946	15	94.80	35,550	4.74	6.63
1947	105	95.20	2,29,154	26.97	42.71
1953	21	100.00	49,031	5.45	9.14
1961	25	95.01	69,380	5.72	12.93
1966	4	100.00	18,280	6.06	3.41
1969	27	96.62	82,090	7.05	15.31
(a) Percentage of major strikes to the total number of strikes					14.58%
(b) Percentage of mandays lost due to major strikes to total number of mandays lost during the period 1942-71					91.79%

District Magistrate intervened the settlement could not be arrived at. It was only on the intervention of Labour Commissioner that the strike was called off on being assured that in all future recruitment, the discharged workers would be given preference. The facts of the case indicate that the process of negotiations could have been speeded up and the mandays lost (9,000) could be reduced.

The second major strike was conducted in July 1946 for 15 days, regarding wages and dearness allowance. 94.80% of the total workers participated in the strike. The strike was throughout peaceful. Negotiations between management and the union which had started even before the strike, continued till such time when an amicable settlement was reached.

The employment activity in the Shipyard was started in 1942 and the daily rates of wages payable to workers were those fixed by the Scindia Navigation Company. By 1946, workers began to feel about the low rates of wages and dearness allowances, and started voicing their discontent on the issue. Negotiations between management and Union were started but they failed to bring about any settlement. Consequently the workers went on strike with effect from the 1st September 1946 to the 15th September 1946. 2,370 out of 2,500 workers had participated in the strike. Although this was a long drawn out strike, it is heartening to note the management and labour could directly settle the issues by continuing their negotiations. This strike resulted in a loss of 35,550 mandays.

The Central Pay Commission submitted its report in April 1947 fixing a minimum wage of Rs. 30/- with a dearness allowance of Rs. 25/- making a total of Rs. 55/- at the prevailing prices of commodities. This recommendation had kindled hopes among working class in general. The workers of the Shipyard realising that they would also be eligible for this wage structure (recommended by the first pay commission) went on strike from the 8th August to 20th October 1947, demanding enhancement of basic wages, dearness allowance and other benefits. The dispute had to be referred to adjudication and with the announcement of the award given by the tribunal the strike was called off after 105 days. It may be noted here that this was the only strike conducted so far by the Labour Union of

the Hindustan Shipyard for such a long period, one would naturally ask was it necessary or was it in the interests of the labour, the management and the nation as a whole to allow the strike to continue (in such an important organisation) for more than three months. Further it should also be borne in mind the effect of this long absence from work on the workers' productivity and commitment towards the job. This would neither be in the interests of the union organisation as the workers in course of time would go back to their native places and likely to forget the efforts of the union leaders. Nearly 43% of the total man-days lost were accounted by this strike.

In 1953, the management retrenched 813 workers against the mutual understanding not to retrench in view of the acceptance of workers for one-third cut in the dearness allowance. Consequently, the workers went on strike from the 22nd April 1953 to 12th May 1953 and all the workers along with the retrenched workers participated in the strike. As a result of this strike the award given by justice Mahajan¹⁵ was implemented, which led to the suspension of the strike.

For a long time the workers have been agitating on a number of issues which have ultimately totalled upto 25 in 1961. In spite of the fact that the union, time and again requested the management to settle all these issues, it was alleged that only two issues had so far been settled and the remaining were yet to be resolved. Consequently, 3,921 workers struck work for 25 days resulting in a loss of 69,380 mandays. The strike ended as a result of discussions at Delhi between the representatives of Labour Unions, State Government and the Central Minister—13 out of the 24 demands were referred to adjudication under Section 10 (1) under the Industrial Disputes Act, 1947. This strike reveals the failure of the collective bargaining process and as a result the parties had to resort to adjudication.

It was for the first time that the employees of the Shipyard

15. Justice Mahajan evolved a formula to retrench the workers in the following orders : (i) a worker who is medically unfit ; (ii) a worker who reaches the age of superannuation ; (iii) a worker who wants to leave the job on his own accord to be allowed to go with provident fund ; and (iv) retrenchment according to the seniority.

(workers as well as staff) had organised a strike continuously for four days on an issue with which they were not directly concerned. When all the Telugu speaking people were agitating in favour of the location of an integrated steel plant at Visakhapatnam the employees of the Shipyard also decided to follow and take part in this widespread movement. Accordingly they struck work on the 31st October 1966 which resulted in a loss of 18,280 mandays. But, however strong the emotions of workers (in respect of the issue) may be it would appear to be waste of national resources to continue the strike on this issue for four days. The responsibility in educating the workers about the necessity of exercising restraint and minimising the loss of production particularly due to political agitations lies on the union leaders.

The last major strike conducted for 27 days was organised jointly by labour and staff to achieve 17 demands including revision of wage structure and enhancement of allowances. It may be noted here that even through some ad hoc improvements of wages and allowances have been made, the wage structure basically remained the same as it was in 1947. Meanwhile two central pay commissions have been appointed and their recommendations naturally had a far reaching effect on the workers of the Shipyard also. Consequently, when the negotiations failed, the Labour Union and the Staff Association in their joint telegram dt. 17-4-1969 served 14 days' strike notice saying that if the 17 demands¹⁶ were not conceded they will be constrained to go on strike and continue till such time a settlement was effected. The strike was started from 1st May and continued upto the

16. The demands were: (i) yard allowance; (ii) cash handling allowance; (iii) wages lost for four days of steel plant agitation; (iv) dismissal of seventy-nine workmen wrongly designated as apprentices; (v) dismissal of three painters and the suspension of two painters; (vi) the unjustified dismissal of fourteen casual painters; (vii) dismissal of two painters; (viii) promotion of staff; (ix) injustice caused to workers in respect of promotions due to warning; (x) violation of factories act; (xi) unjustified deduction of six days' wage for two hours walk out; (xii) outdoor allowance of staff; (xiii) victimising transfers of staff; (xiv) victimising the labour unions; (xv) Requirement of medical certificate from a civil assistant surgeon; (xvi) technical and judicial enquiry into the management of the Hindustan Shipyard; and (xvii) suspension of Honorary President of the Labour Union and General Secretary of the Staff Association.

28th May 1969. Conciliation proceedings were held by the Assistant Commissioner of Labour, Visakhapatnam for three days. But no settlement was reached. When it was known that the entire wage structure was going to be revised by the Central Wage Board the workers called off the strike. This strike resulted in a loss of 82,090 mandays. This was the biggest strike in the history of the Shipyard since it came under the control and ownership of the Government of India. The duration of the strike invariably provokes any impartial observer to question about the inevitability of the strike or allowing the strike to continue for nearly a month. The three parties labour, management and the government will have to share the responsibility for the loss of production to the tune of Rs. 50 lakhs during the period of the strike.

This analysis clearly reveals that all the above major strikes could have been averted or at least their duration reduced, if only, all the parties had realised their responsibility towards the nation. It is also unfortunate to note that it is only after the strike had started that the things had moved on speedily and the management and government were forced to come to settlement with the labour. This tendency is found broadly throughout the country but unless this is checked it may not be possible to expect any decline in the incidence of strike activity in the country. The Shipyard is no exception to this. It is heartening to note that during the last two years 1970 and 1971 not even a single manday was lost due to strikes in the Shipyard. This speaks of the constant alertness and wide realisation on the part of the management and labour, If this spirit of conciliation, adjustability and understanding prevails and if the method of collective bargaining is relied upon to resolve all the differences, the Shipyard can hopefully expect to become a model public sector undertaking in the entire country.

F. Workers' Opinion

During the course of the interviews the selected workers were asked whether they participated in the last strike, i.e., the major strike of 1969. 95.34% of the skilled workers, 80% of the semiskilled workers and 88.88% of the unskilled workers said that they participated in the strike. The overall percentage has been worked out at 91.22. This heavy participation

can be explained by the importance of the demands particularly revision of wage structure and enhancement of allowances for which workers went on strike.

The outcome of each strike determines the extent of satisfaction of workers and their attitude and their strike proneness. This also indicates the significance of strike as viewed by the rank and file workers in resolving their conflicts with the management. The assessment of workers regarding the outcome helps both the union and the management in shaping their future policy decisions, relating to different aspects of employment in particular and industrial relations in general. Hence with this idea the selected workers were asked whether they were satisfied with the outcome of the last strike in which they participated—invariably the major strike of 1969. It is surprising to note that even though this strike was conducted for 27 days, only 39.02% of workers were satisfied with the outcome of the strike. Slightly higher percentage of unskilled workers (55.55%) were satisfied with the results of the strike. 38.54% of workers frankly admitted that they were not satisfied with the outcome of the strike of 1969. This is an important indication to both the union and the management in framing their future policy decisions.

The selected workers were also asked whether they would approve the proposal of banning strikes at least for two years. As already pointed out in the beginning of this chapter, suggestions have been made from important quarters to ban strikes at least for a period of five years so as to ensure an uninterrupted flow of production. It is interesting to note that 44.87% of workers in the Shipyard were in favour of banning strikes—for two years. This group was large among unskilled workers. Further since a considerable percentage of workers were not satisfied with the outcome of the recent strike in which they participated and had to go without wages for 27 days, naturally they were in favour of banning the strikes. 39.51% of workers had strongly refuted the proposal of banning the strikes, and this group probably forms the hard core among the workers, who had very strong convictions in favour of strikes and agitations. Further it may be noted this group forms the backbone of union activities and are likely to create problems

from time to time for the management.

G. Analysis of Staff Strikes

The employment structure of the Shipyard consists of not only workers but also staff who constitute roughly one-fourth of the total employment. Strikes conducted by staff may not result in stoppage of ship construction work but they will definitely influence the morale of the workers and this vitiates the entire atmosphere of industrial relations in the organisation. Hence, a study of strikes conducted (and their effects) by staff is considered to be relevant in this enquiry.

The staff have started going on strike only from 1952 demanding the restoration of cut in dearness allowance (Table 7.8). This strike which was organised jointly by workers and staff resulted in a loss of 706 mandays (pertaining to staff). The second strike was organised for six days so as to achieve favourable decisions on eight disputed points. In 1957, to pay homage to the departed leader late Shri T. Prakasam—a veteran Andhra Leader—staff decided to abstain from work along with workers. Towards the end of 1959 the staff, so as to express their displeasure against the office timings, started reporting late to duty by half an hour every day commencing from the 23rd November 1959 to 30th January 1960. However, in this protest strike, only one-sixth of the total strength of the staff participated. In 1966, a joint strike was organised by both the staff and the workers demanding the location of the steel plant at Visakhapatnam. Since this issue has evoked widespread interest throughout the state, the employees of the Shipyard probably felt that they too should contribute to the efforts of their fellow brethren in agitating for the establishment of the first integrated steel plant in the state. In 1967, two strikes were organised by the staff—the first one being the result of the desire of staff to attend the general body meeting during the working time without the approval of the management and the second one, the longest so far conducted by the staff association—was organised for 57 days. The demand mainly related to revision of wage structure and enhancement of allowances. In this strike, almost all the staff members participated. The above two strikes resulted in a loss of 53,368 mandays and an amount of Rs. 8,58,171 was lost towards salary.

TABLE 7.8
ANALYSIS OF STAFF STRIKES

Year	No. of strikes	D/P	J/S	Duration (in days)	Number of staff involved	Percentage of staff involved to the total strength of staff	Mandays lost	Amount of salary lost Rs.
1952	1	P	J	2	365	79.16	706	2,987
1956	1	P	S	5½	596	96.13	1,989	21,655
1957	1	P	J	1	185	25.59	114	641
1959	1	P	S	39	150	17.96	300	NA
1960	1	P	S	30	150	17.58	225	NA
1965	1	NA	NA	NA	695	59.91	223	1,915
1966	1	P	J	4	1,214	100.00	4,572	40,290
1967	2	P	S-J	58	2,168	85.28	53,368	8,55,171
1968	1	P	S	1 hour	764	63.40	109	16,416
1969	1	P	J	27	877	71.70	26,458	2,49,000

Note: D/P = Departmental Strike or Plant-wide strike
J/S = Joint Strike (organised jointly with the workers) or
Separate Strike (organised exclusively by staff)

The second major strike – a joint strike by staff and workers – was conducted in 1969 demanding favourable decision on 17 issues. This strike also had registered cent per cent participation by the staff and resulted in a loss of 26,458 mandays. As a result of this strike, a One-man Committee was appointed and their recommendations have led to the wholesale revision of emoluments and allowances as has already been dealt with in Chapter V.

H. Workers' Participation in Management

Management and labour are the two wings of industrial community. Mutual understanding and harmony between the two are essential factors for survival and growth of the industry. Both these wings should work as complement to each other and not as rivals. Workers' participation in management is one among the important ways to usher in such harmony. This scheme definitely paves a way for the emergence of an era of industrial democracy which is the prerequisite for the establishment of socialist society. It may be mentioned here that the desire to participate is not a passing fancy. It is rooted deep in the culture of free man around the world.¹⁷

The scheme of workers' participation in management rests on "the fundamental premise that the workers are partners of industry and not paid employees alone. They have a right in taking decisions, formulating policies and running the enterprise."¹⁸

In the Hindustan Shipyard a beginning could be made by developing workers' participation at the lower level first, that is beginning from the departments. A committee could be formed with the workers and the manager of that department, which from time to time could discuss important matters relating to productivity and other allied matters of the department mutually and reach a decision. This may be supported

17. Comparative studies in England and the United States suggest that participation is a basic human drive rather than a cultural acquisition. N.R.F. Maier and Hoffman, L.R., "Group decision in England and the United States." *Personnel Psychology* XV (Spring 1962), p. 86.

18. Vidyadhar Agnihotri, *Industrial Relations in India*, Atma Ram and Sons, Delhi, 1970, p. 70.

by a Joint Committee at the yard level. With the successful implementation of these two levels, the Government in course of time could draw up a plan of giving workers a representation in the Board of Directors. The Hindustan Shipyard being one of the biggest public enterprises should not lag behind in implementing these novel schemes so as to ensure maximum co-operation from employees. It may be noted in this context that the Hindustan Shipyard Labour Union had demanded workers' representation on the Board of Directors in 1961. Further, it is seen that the workers very often had to approach the management, for interview with the Board of Directors. So if the workers were given representation on the board the union could discuss all important matters freely and frankly with the other members of the Board. Further this scheme enables both workers and management to jointly discuss the problems of mutual interest and hammer out solutions to the various problems in an atmosphere of confidence and mutual trust, with a spirit of give and take on either side and sincerity of purpose. And inspite of the initial difficulties to be faced in implementing the scheme, it does have enormous potential for raising productivity, better morals and improving creative thinking there by increasing adjustability, and reducing outside intervention. Workers' participation is also proposed as a remedy for industrial conflict.¹⁹ Hence the management and unions of the Shipyard should strive for implementing the scheme and make it a success.

19. This appears to have been one of the objectives of the Workers' Constitution Act in the Federal Republic of Germany, Furstenbery, F.: "Workers' Participation in Management in the Federal Republic of Germany," IILS Bulletin (6), 1969, p. 101 - quoted in International Institute for Labour Studies Bulletin 12.

EMPLOYEE ORGANISATIONS

A. Growth of Unionism

“Labour Movement in its modern form is to some extent the outcome of the evils of capitalism.”¹ Industrial revolution has created two classes of people — capitalists and labour — and dissolved the old personalities and made the bargaining between them impersonal and cold blooded. The most important characteristic of capitalism is large scale production. Under the old dispensation, an employer knew all his workmen personally and there was no need for any intermediary. But where the employer himself became impersonal in the organisation, he becomes incapable of understanding and appreciating the problems of each and every employee. If everyone of the thousand workers employed individually took their representation to the employer, it undoubtedly consumes time and energy. And so the trade union became the organised mouth piece of the workmen collectively which seeks the redressal of the grievances of their members. “Trade Union Movement has emerged as a result of growing complexities of economic structure, growth of class consciousness and attainment of

1. Sivayya, K. V., *Trade Union Movement in Visakhapatnam*, Andhra University Press, Waltair, 1966, p. 56.

common objectives among the working class population.”² Trade union helps to eliminate hardships, strengthens their bargaining power for higher wages, better working conditions and thereby help raise their living standards. In common parlance it is understood to be a voluntary continuous association of wage, salary and fee earners for improving the conditions of its members inside and outside the place of employment.³

To a certain extent, a trade union can bring about harmonious relationship between the employers and employees. It creates a sort of responsibility in the minds of the working people; affords for increasing industrial productivity and thereby helps for the prosperity of the employer, employees and the nation at large. Trade union, no doubt, has a vital, crucial and decisive role.

The growth and character of trade unionism in a country or region is conditioned by a complex set of social, economic and political factors. Trade Union Movement in India, however, has not grown upon sound lines and is today be-set with many obstacles. Trade unionists, like politicians or industrialists, tend to develop personal vested interests and most of the time they are concerned with preserving the little empires, “Most of the leaders in the Indian trade unions are ‘outsiders’, i.e., they are educated, middle class individuals who come into union work from outside rather than through the wage earning ranks.”⁴ Most of these leaders combined political interests with union work and consequently they could not focus their attention on the internal functioning of their unions or on the daily problems of members in the work place.⁵ Further

2. Vidyadhar Agnihotri, op. cit., p. 31.

3. Webb defined the trade union as ‘a continuous association of wage earners for the purpose of maintaining or improving the conditions of their working lives’ (Sidney Webb & Beatrice Webb, *History of Trade Unionism*, London, 1950, p. 1); and this still holds good.

4. Van Dusen Kennedy, *The Role of the Union in the Plant in India*, (Reprint No. 83), Berkeley Institute of Industrial Relations, University of California, 1956, p. 8. This has also been pointed out by Charles A. Mayers and Subbiah Kannappan, *Industrial Relations in India*, Asia Publishing House, Bombay, pp. 174-175.

5. Ibid, p. 8.

they hold a multiplicity of officers.⁶ Another factor is, the agitational attitude of trade unions as predominated over the constructive attitudes with the result that many lines of positive and constructive work in which the unions could engage themselves are totally neglected.

Independent trade unions and independent trade union leadership are in a microscopic minority. The weakness is often exploited by the employers who follow the policy of divide and rule. In addition, the low standards of living and long hours of work leave the workers neither with energy nor with time to pursue any trade union activity. Another peculiar feature of Indian trade unionism is the existence of low membership which has resulted in poor finances,⁷ organisation, and leadership. Generally they have not been strong enough to compel employers to recognise (or negotiate with) them.⁸

B. Unionism in the Hindustan Shipyard

A study of the history, growth, structure and working of trade unions in individual industrial establishments helps us in knowing the forces which influenced the labour management relations in those establishments. Hence an attempt is made to study trade union movement in the Hindustan Shipyard. The Scindia Shipyard Labour Union was founded on the 13th November 1943, and it was the second union of the town next to the port union. Simultaneously another rival union by name Scindia Shipyard Workers' Union which was affiliated

6. William H. Friedland, *Unions and Industrial Relations in Under-developed Countries*, New York State School of Industrial and Labour Relations at Cornell, Bulletin 47, p. 26. In fact it has been proposed by Van D. Kennedy to limit the number of offices that union leaders in India could hold in his book *Problems of Indian Trade Unionism and Industrial Relations* (Reprint No. 77), Berkeley : The Institute of Industrial Relations, University of California, 1955, p. 11.

7. Giri, V.V., veteran trade union leader and ex-President of India, has also pointed out that "trade unions in India suffer from chronic paucity of funds even to run the union on proper lines." "They lead only hand to mouth existence."

8. Subbiah Kannappan, *Workers' Participation in Management A Review of Indian Experience* (Reprint No. 5), International Institute for Labour Studies.

to the All-India Trade Union Congress (AITUC) came into existence. The significant aspect of the Scindia Shipyard Labour Union is that, the initiative for its establishment came from the management which extended all encouragement and moral support by extending recognition within two days of its formation. The interest of the management for initiating and recognising the above union was perhaps to eliminate the outside interference in the working of the union and probably to discourage and eliminate the rival union (Scindia Shipyard Workers' Union which was finally refused recognition on the 30th May 1946). The initial membership of Labour Union was 310 workers and the first President was Shri F.S. Rodgers, an employee of the Shipyard.

In 1948, the Scindia Shipyard Labour Union and Scindia Shipyard Workers' Union were merged together and a new union under the name of Scindia Shipyard Labour Union came into existence.⁹ This new union was affiliated to INTUC from 1948 to 1951.

The succession list of the Presidents of the Scindia (subsequently Hindustan) Shipyard Labour Union is given below :

Period	Name	Employee/ Outsider
1943-45	Mr. F.S. Rodgers	Employee
1945-46	Mr. D. Rama Swamy	Outsider
1946-51	Mr. Gouthu Latchanna	Outsider
1951-54	Dr. Lanka Sundaram	Outsider
1954-55	Mr. M.V. Bhadram	Outsider
1955-56	Dr. M.V. Krishna Rao	Outsider
1956-62	Mr. Pilla Veeranna	Employee
1962-66	Mr. K.S. Sastry	Outsider
1966-67	Hony. President :	
	Mr. V. Jagannadha Rao	Outsider
	President :	
	Mr. Manumalaiah Naidu	Outsider

9. The name of this union was subsequently changed to The Hindustan Shipyard Labour Union in 1952.

1967-69	Mr. J.V.S.N. Raju	Employee
1969-70	Hony. President : Mr. A. Krishna Murty	Employee
	President : Mr. J.V.S.N. Raju	Employee
1970-71	Hony. President : Mr. A. Krishna Murty	Employee
	President : Mr. M. Suryanarayana Murty	Employee
1972	Hony. President : Mr. M. Suryanarayana Murty	Employee
	President : Mr. P. Sasibhushan	Employee

This list reveals that the union had an outsider as their President from time to time the beginning of which was made in 1945. These Presidents belonged to different political parties. It is an interesting feature to observe that the same individual who organised the labour in the Visakhapatnam Port and acted as President also acted as President of the Shipyard Union from time to time. The Shipyard Labour Union was under complete control of the Shipyard workers for about seven years between 1955 and 1962 under the President Ship of Mr. Pilla Veeranna, a worker of the Shipyard. After the strike debacle of 1962 the labour union favoured outside leadership and Shri K.S. Sastry, a socialist congress man became its President with Mr. M.V. Bhadram, a communist leader as its Vice-President. The combination of Congress President, Communist Vice-President and Committee Members belonging to various political parties, did not lead to a strong and stable labour union, as the Vice-President resigned within six months of the election and with the removal of Secretary (communist) within the next three months, the union was left only with the Congress President. The President was in office for a period of about five years. In 1966, the leadership of the union changed completely as the workers wanted to have Mr. V. Jagannadha Rao, an outsider and an active member of INTUC as their Hon'y. President and elected him along with Mr. Manumalaiah Naidu another outsider as the President of the Labour Union. This newly constituted committee could only hold the office for

little more than a year, as the two key posts were held by outsiders, which in course of time brought many differences with the workers. Again in 1967, the union movement took an opposite turn. There was enthusiasm among workers, to have an internal leadership as they started believing that an insider could solve the problems much better, when compared to an outsider. Thus it is seen from 1967, till today no outsider leader has been elected nor do they have any intention of choosing, in the near future, an outsider as their leader as is seen from above. In the year 1967, Mr. J. V. S. N. Raju was elected the President of the Labour Union and continued for four years effectively during the period 1967 to 1970. During the same period, i.e., in 1969 the labour union and the staff association together went on a strike for nearly one month. The major demands of the strike included revision of pay scales and demand to discontinue of the policy of victimisation. During the period when the staff member was refused recognition by the management as Hony. President of the Labour Union, the workers staged a walkout, for which management resorted to cut the wages for the period of walkout. Though during the above period, workers continued to attend their work, they refused to accept their wages till such time, the Hony. President was recognised, and the cut in wages was restored after four months. This surely was a memorable incident in the trade union movement of the Shipyard. The above mentioned strike of 1969 was a complete success, as most of the pending issues of the labour union with management were settled to the satisfaction of the union. A One-man Committee was appointed for the study of possible pay scale revision. In the same year there was a change in the top management and soon the relations between the management and the union became cordial and good. There were no strikes and the workers who were dismissed earlier were reinstated by the management to maintain good relations with the union. The Labour Union Committee which was elected in 1969 continued till 1971. In 1972, Mr. Suryanarayana Murty was elected as Hony. President and Mr. P. Sasibhushan who was till then the Vice-President was elected as President of the team. This team continued till December 1973.

The present union is not affiliated to any central organisation. The relations between the union and the management since June 1969 are observed to be very cordial. Disputes have come to be settled mostly across the table.

The Hindustan Shipyard Staff Association was formed in February 1946 with a membership of 320. The Association was established as a result of the untiring efforts of the founder President Mr. V. Laxminarayana Rao, an employee of the Shipyard. The Hindustan Shipyard Officers' Association was formed in 1947. The membership is restricted only to the confirmed officers of the Shipyard. This Association is not a registered body. The leadership of both Staff and Association and Officers' Association was from the beginning, held by employees of the Shipyard.

The qualities for successful leadership were primarily, honesty, patience, integrity, courage, good behaviour, promptness in taking action and in addition he should be educated and well versed with various legislative enactments. Most of the workers in the Shipyard saw their leaders often and they also said that the leaders were helpful to them. Only very few workers remarked that they were leaders for name sake only. When they were asked how they felt about an outside leading them, 81.46% of workers said they did not want outside leadership as they felt internal leader was more helpful than an outsider. 58.05% of the workers were not in favour of any change in the present union leadership and 58.05% of workers were of the opinion that their union at present was functioning better than other unions which they were aware of.

As in other places, it is true in the case of the Shipyard also the political rivalries have led to the starting of a rival union, under the name of the Hindustan Shipyard National Employees' Union during the first half of 1969. But the response was very poor and consequently by 1970 it had almost been defunct. In order to ascertain the opinion of workers, the selected group of workers were asked if they liked to have more than one union. 96.59% of workers were of the opinion that there should be only one union, as the existence of two or more unions would weaken the workers' stand and management would take advantage of the unions' weakness.

Table 8.1 gives the membership figures of the Hindustan Shipyard Labour Union and the percentage of union strength in total workers from 1952-53 to 1970-71. The membership was 3,136 in 1952-53 accounting for more than 84.44% of total workers. The next year witnessed a sudden decrease to 364 members, accounting for only 11.93%. However in the subsequent years it was on the increase. Again from 1959-60, the number of members was on the decline and it came down to 210 in 1961-62. From 1962-63 there was an increase in members and reached to 3,250 accounting for 83.16% in the year 1970-71. This could largely be attributed to cordial relations between the union and the management and the active role being played by the union in promoting the welfare of the members, through direct negotiations with the management. The figures show that membership is gradually increasing from year to year and this is no doubt partly due to increasing number of employees in the Shipyard. Most of the union leaders agreed that there were fluctuations in the union membership but their views varied. One prominent leader was of the view that when there was less industrial conflict between labour and management, the membership declined. The other reason given was, that the type of leadership had its due influence on the membership of the union. One member pointed out that because of the inefficiency of the office bearers in regard to the collection of membership fee it resulted in decline in the union membership. Sometimes when the leaders were asked, how they thought that the stability and progress of the union could be maintained, some of them suggested that there should be departmental meetings in which the workers may be enlightened about the union and its activities. One leader pointed out that for stability of the union, the trade union needed to have good and effective leadership throughout. Most of the union leaders said that the reasons prompting the workers to join the union were, their desire for recognition of group effort to secure their rights through collective bargaining, security of service and efficient working of the union.

The selected group of workers (most of them were found to be members of the trade union) were asked to specify the functions of the union in order of their preference. The first

TABLE 8.1
MEMBERSHIP OF THE HINDUSTAN SHIPYARD
LABOUR UNION – 1952-53 TO 1970-71

Year	Membership*	Percentage of the total workers
1952-53	3,136	84.44
1953-54	364	11.93
1954-55	1,683	57.81
1955-56	1,662	52.65
1956-57	1,702	48.92
1957-58	1,724	43.67
1958-59	2,038	51.91
1959-60	1,308	34.00
1960-61	NA	—
1961-62	210	5.07
1962-63	850	20.41
1963-64	850	20.26
1964-65	1,000	23.82
1965-66	1,200	28.54
1966-67	2,100	50.38
1967-68	2,100	51.01
1968-69	2,600	64.92
1969-70	3,100	79.79
1970-71	3,250	83.16

NA=Not Available

*Strength at the end of the year.

and foremost function of trade union according to 55.61% of total number of workers was to bargain with the management so as to improve the economic conditions, raise wages and to act as a representative in collective bargaining. 56.58% of skilled, 60% of semiskilled and 47.22% of unskilled workers exercised their first preference in favour of that. 37.08% of the workers, however, pointed out that the first function of the trade union was to defend the interests of workers to protect workers, to get fair treatment and to fight with management for the sake of workers. 34.88% of skilled, 20% of semiskilled and 36.11% of unskilled workers preferred this. According to a

majority of workers, to change the social and political system of the country is not a function of a trade union and it was listed last in the order of their preference. The workers were found to be highly interested in unions and considered them a necessity. But despite these positive attitudes, their level of involvement with the union activities was rather low. Less than 50% of the workers attended meetings—even during strikes. Even those who attended hardly spoke. Many workers, it was seen during the time of interview, did not know or bother to know the names of leaders beyond the name of Hony. President or the President. Though the union leaders in general felt that most of the workers were loyal but when directly asked about the percentage of active and loyal workers, they pointed out it was around 20 to 30% excepting one or two who said it was about 70%. They were also of the opinion that workers during the strike should not seek alternative jobs or go to native place as was being done by many for, it weakened the union's stand.

C. Finances

Table 8.2 gives the income and expenditure of the Hindustan Shipyard Labour Union from 1957-58 to 1971-72. Major source of income for the union as seen from the table was membership fee paid by the workers. All the union leaders said that the subscription was regularly paid by the workers. The selected group of workers who were interviewed on the whole were satisfied with the working of their union, and were regular in paying their subscription, the opinions of course were divided on the method of payment of subscription. About 50% of the workers were in favour of union officials directly collecting from them the reason being that this forces the union office bearers to approach their members or vice-versa thus providing an opportunity to exchange their views. The other 50% were in favour of management collecting their subscription. When asked how they thought they could improve the financial position of the union, all union leaders expressed satisfaction regarding the financial position of the union and showed no anxiety for further improvement. One union leader pointed out that more finance would attract more unscrupulous leaders to the posts.

The major heads of expenditure of the union is shown in Table 8.2. It is seen salaries, allowances and expenses of establishments constituted the major heads of expenditure and in the years 1966 and 1967 they were beyond Rs. 9,000. However, they reduced drastically in the years 1970–71 and 1971–72 because of peaceful conditions prevailing. Other expenses are audit fee, legal expenses, expenses in conducting trade disputes and miscellaneous expenses.

However, the existing financial resources are considered to be inadequate to undertake any new activity so as to promote cultural, social and economic interests of its members. The union may organise certain welfare and recreational activities, set up distress funds and run a periodical to serve as an effective link with its members. All this however, needs finance. And as membership fee is the major source of finance, the membership fee could be raised to at least Re. 1/- per month which now is only 25 paise per month. Lack of adequate finance is a source of great weakness of the trade union movement in India. Union leaders in their anxiety to build up membership of as large a magnitude as possible, fix membership fee extremely low and fail to collect even this meagre amount. Rarely any attempt is made to terminate the membership of a person for having fallen into arrears of payment of dues. For sound trade unionism, it is essential that there should be adequate funds available with unions and in providing finances from internal resources is an important aspect of strengthening the movement. This enables unions to have full time office bearers. Honorary and part-time office bearers whatever might be their sacrifices, cannot do full justice to the task entrusted to them because they cannot pay adequate attention to the union work. However, the workers during the course of interviews were asked how they favoured the idea that the union leaders be paid some honorarium. Most workers were against this suggestion, and majority felt that the leader would not have any respect and prestige left if he started taking money; few others were of the opinion that when the workers themselves had not enough how could they afford to pay the union leader. Some workers have pointed out that if the union leaders were paid some honorarium, many people would

crave to become union leaders, whether they were really capable or not.

Table 8.3 shows the assets and liabilities of the Hindustan Shipyard Labour Union from 1957-58 to 1970-71. As can be seen there was hardly any addition to the assets of the union during the period. The amount of Rs. 4,576 which was collected for temple is shown from 1960-61 as the immovable property. Value of goods and furniture was constant (Rs. 1,053) during the period 1957-58 to 1967-68 and thereafter increased to Rs. 1,082 in 1967-68 and continued upto 1970-71. The union assets varied between Rs. 5,957 to Rs. 12,447 during the period 1957-58 to 1970-71. The liabilities were minimum (Rs. 5,957) in the year 1968-69 but again they were on the increase for the last two years 1969-70 and 1970-71. By the end of 1970-71 they were shown at Rs. 12,684. The union maintained political fund account and its account showed a balance of Rs. 426 for the last several years as can be seen from Table 8.3.

Table 8.4 gives the details of the union meetings. The information was collected from the minutes book of Labour Union. During the last two years, i.e., 1969-70 and 1970-71 the meetings reduced drastically. It will be observed that during the period of unrest more number of meetings were held, than when the relations between the management and union were cordial. As there were no strikes after 1969, the meetings also have decreased (four in 1970-71).

TABLE 8.3
ASSETS AND LIABILITIES OF THE HINDUSTAN SHIPYARD LABOUR UNION

Year	Assets				Liabilities			
	Cash in hand	Cash in Co-operative and other banks	Goods and furniture	Immovable property	Total	Amount of General Fund	Amount of political fund	Others
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1957-58	4,913	519	1,053	—	6,485	6,053	426	6
1958-59	4,906	1,400	1,053	—	7,359	6,927	426	6
1959-60	5,255	1,202	1,053	—	7,510	7,078	426	6
1960-61	576	1,394	1,053	4,576*	7,599	7,167	426	6
1961-62	222	506	1,053	4,576	6,357	5,925	426	6
1965-66	992	836	1,053	4,576	7,457	6,925	426	106
1966-67	23	6,795	1,053	4,576	12,447	11,915	426	106
1967-68	35	2,401	1,053	4,576	8,065	7,533	426	106
1968-69	10	326	1,082	4,576	5,994	3,952	426	1,616
1969-70	32	267	1,082	4,576	5,957	5,425	426	106
1970-71	68	2,444	1,082	4,576	8,270	7,638	426	106

Figures for the years 1962 63, 1963-64 and 1964-65 are not available.

* This amount (contribution collected for temple) has been shown as immovable property from 1960 61. The same amount was shown under cash in hand in the previous years 1957-58, 1958-59 and 1959 60.

TABLE 8.4

MEETINGS OF THE HINDUSTAN SHIPYARD LABOUR UNION 1957-58 TO 1970-71

Year	Committee Meeting	Emergency Committee Meeting	General Body Meeting	Emergency General Body Meeting	Extra General Body Meeting	Joint Meeting	Total
1957-58	1	6	1	3	-	-	11
1958-59	10	5	2	-	-	-	17
1959-60	6	5	4	-	-	-	15
1960-61	5	14	9	4	-	-	32
1961-62	2	6	-	2	-	-	10
1962-63	-	-	-	-	-	-	-
1963-64	-	-	-	-	-	-	-
1964-65	-	-	2	2	-	-	4
1965-66	2	3	4	7	-	-	16
1966-67	9	4	1	-	-	-	14
1967-68	6	8	-	3	-	-	17
1968-69	11	-	-	1	-	6	18
1969-70	7	-	1	-	-	3	11
1970-71	4	-	-	-	-	-	4

EVALUATION AND SUGGESTIONS

Every country, having a coast line of its own, has recognised the importance of shipbuilding industry, in strengthening its infrastructure which is a pre-requisite in promoting its economic and strategic interests. India, one of the biggest maritime nations having a coast line of more than 3,000 miles can no longer afford to ignore the crucial role being played by the shipbuilding industry in the growth of merchant fleet to carry overseas as well as coastal trade, and in strengthening the naval fleet. In respect of India's foreign trade, shipping is the vital link because 98% of her exports and imports move by maritime transport. But due to inadequate tonnage of national shipping India has to depend upon foreign shipping to carry 80% of its overseas trade thus resulting in an outflow of Rs. 180 crores worth of foreign exchange annually. Thus the development of national shipping not only helps in reducing dependence on foreign powers and curbs the drain on much needed foreign exchange, but also helps to serve the existing markets more efficiently and to explore the new ones. Further inadequate shipbuilding facility is a major constraint on the expansion of coastal shipping and in fulfilling the programmes of Indian Navy. Acquisition of adequate tonnage - either for merchant shipping or for navy - from abroad would not only involve a sizeable foreign exchange allocation running into a few thousand crores of rupees, but also uncertainty in getting supplies

from abroad at the right time. Further, a rapid expansion of the indigenous shipbuilding industry will induce a corresponding growth of multifarious engineering and marine equipment industries, thus contributing to the expansion of industrial production, employment opportunities and national income.

The Hindustan Shipyard, the premier shipbuilding unit in the country, which has been producing medium sized ocean going vessels on a continuous basis for the last 30 years has a decisive role to play in stepping up the national shipping tonnage. The Shipyard, which began in 1946 with the construction of steam ships in the range of 8,000 DWT, with the phased programme of expansion, under the technical guidance of French and West German consultants, during the last two and half decades has now reached a stage of development of accepting orders, for completely welded general cargo vessels upto 15,000 DWT and bulk carriers upto 25,000 DWT. As on the 31st March 1974, a total number of 63 ships (including passenger ships, naval survey vessels and other specialised marine craft) aggregating to over 5,37,671 DWT have been built and delivered by the yard. So far its contribution to total Indian tonnage has been 10% and the saving in foreign exchange on account of this is reckoned at Rs. 30 crores.

The Fifth Five-year Plan aims at the creation of an additional five million GRT, so as to carry 50% of India's overseas trade and cent per cent of coastal trade by the end of 1978-79. Hence the Hindustan Shipyard Limited has to build ships cheaper and faster than hitherto done and this to a large extent will be facilitated through complete unity of thought and action between management and labour.

Employment Structure and Trends

The Hindustan Shipyard is one of the big public sector undertakings employing a workforce of 5,372 as on the 31st December 1971 comprising of people with different skills and with various socio-economic backgrounds. In conformity with the requirements of the additional workforce in different departments the total strength of employment has gone up by 16.83% although much of this increase was shared by the staff (77.73%) and officers (111.21%) during the period 1957 to 1971. The total

number of workers has increased by only 2.47%. As a result, the number of officers and staff to 100 workers has gone up from 22 in 1957 to 39 in 1971. The structure of employment shows that while skilled workers increased by 88%, the semi-skilled and unskilled workers decreased by more than 40% each during the period of 15 years; thus indicating a phenomenal increase in the demand for skilled workers. This was no doubt due to increased use of automation, mechanisation and other advanced techniques of operation.

A study of the social characteristics of workers in the Hindustan Shipyard showed that 93.66% were Hindus; 92% were married and had seven or more dependents on an average. Nearly 70% were natives and the rest to a large extent were those who migrated to Visakhapatnam from nearby places. The study also revealed that the Shipyard has young and energetic workforce, since most of the workforce belong to the age group 31–35 years. 72.68% of selected workers are literates. In respect of staff the age varied between 30 and 45 years.

The process of recruitment in the Hindustan Shipyard is carried out in accordance with the procedure laid down in this regard. The Personnel Department in respect of officers and staff and Labour Department with regard to workers assume main responsibility in recruiting new employees, as per the requirements of different departments. While the Managing Director is competent to approve posts upto Rs. 500/- to be ratified by the Board later on, posts carrying pay scales which project beyond Rs. 500/- are put up to the Board for prior approval. Selection committees are constituted, for the purposes of interviewing candidates for different posts depending upon the nature of the posts. Independent members of some local standing are also included in the committees. Proficiency tests are also conducted wherever necessary. The Shipyard has its own training school, where the new recruits undergo training before they are absorbed as skilled workers in their respective trades. Thus majority of skilled workers in general are not recruited from outside sources. Apprenticeship and training programmes are considered adequate enough to meet the need for skilled workers. Further to help boost the morale of workers the management decided to give preference in recruitment to

the sons of employees, particularly, who have met with fatal accidents or death or death after retirement.

An enquiry into the method of getting employment in the Shipyard showed that less than one-fourth of the workers got jobs through employment exchange, 45.85% of the workers by direct application and about 17% of the workers through relatives' influence. It is also found that nearly 33% of the workers have some kind of relatives working in the Shipyard. 53.97% of staff have got their jobs by applying directly. Compared to workers, a slightly higher percentage – 38.10% could get jobs among staff through employment exchange. Job security was one of the important factors that attracted to the Shipyard, leaving their earlier jobs. The accession rate among workers not only varied from year to year but also among the different skills. While it was 12% in 1957 it came down to 7.15% in 1971. It was observed that an effective system of manpower recruitment with long range forecasting and planning in terms of quantity and quality is required. This will help the process of recruiting and developing manpower on a systematic basis in the best interests of both the organisation and its employees.

Sound Transfer Policy is very important in any organisation for it influences the work effectiveness. Transfers in the Shipyard were found to be declining from 4.01% in 1957 to 0.87% in 1971. The most common form of transfer is that of shifting workers from one department to another in the same job. This was done when there was insufficient work in any department.

One of the most important aspects influencing morale and contentment of workers in any organisation is its promotion system. Committees are constituted to look after the matters relating to promotions. In the case of staff, all appointments to higher positions are made from the existing posts on the basis of seniority and performance. Promotion from unskilled to semiskilled are made depending upon their regularity in attendance and clean record of service during the two preceding years and their performance in the test conducted for this purpose. All those workers who have put in one year of experience as semiskilled will be considered for promotion to skilled categories. Skilled workers are promoted to selection

grades upto a maximum of 10% of the strength of the skilled category. A study of the promotions shows that the rate of promotions (the percentage of number of promotions to the average strength of employment in that particular category) varied from year to year. In respect of promotions from semiskilled to skilled it was around 6% during the last three years, but as regards promotion from unskilled to semiskilled the rate of promotion was the highest (16.06%) in 1971. A provision has also been made whereby workers who are found fit to cross the efficiency bar are again tested after a period of one year. However, it has been complained by the sample workers that favouritism and nepotism influence promotions in the Shipyard. This unhappy feeling was also expressed by officers. It is necessary that the management should try to impress upon the employees about the fairness with which the promotion policy is implemented.

The external turnover rate in the Hindustan Shipyard was by and large less than five in any category during the period 1957 to 1971. For many years it was around three. This shows the stability of the workforce. The percentage of workers resigned from job declined from 42.39% to 13.41% during the period 1957 to 1971. Dismissals due to long unauthorised absence had declined from 41.57% in 1959 to 8.54% in 1971. But it is also found a large number of outgoings were from skilled category, probably indicating thereby the existence of better employment opportunities, for this category, in other establishments of this fast growing town. It is also to be noted in this context that workers declared medically unfit and cases of deaths were under increase—while the former has gone up from 1.99% in 1957 to 14.63% in 1971, the latter had increased from 17.88% to 35.37% during the same period.

Disciplinary Behaviour

The organisational set up of any concern influences significantly the dimensions of discipline and performance efficiency of its workers. Basically the existing organisational structure of the Shipyard has been built up from the nucleus taken over from the Scindia Steam Navigation Company in 1952. But this was modified in consultation with the french experts so as to

meet the growing needs of the Shipyard. However, a study made by the ad hoc committee in 1966 pointed out some of the deficiencies of this organisational set up and consequently a new pattern of organisation was evolved and implemented. The Shipyard has a separate wing incharge of personnel administration; while the Personnel Department deals with all the matters relating to staff, the Labour Department deals with workers. The Labour Welfare Department looks after the welfare amenities like medical aid, canteen, recreation, education, etc. However, inspite of increasing importance of efficient utilisation of human resources, cost considerations; detailed specification of requirements of different jobs and time and motion studies, in almost all activities are absent in the Shipyard.

An attempt is also made to have an insight regarding the impression of workers regarding their likes and dislikes of the present job; their opinion about the supervisor and such other factors which undoubtedly will have influence on the absenteeism, morale and productivity. A large percentage of workers (62.93%) liked their job. 88% of the workers were of the opinion that their supervisor was interested in their welfare. Most of them have also said that the supervisor took prompt action whenever they complained and he had a friendly feeling towards them. They were also satisfied with the knowledge and the behaviour of their supervisors. Nearly 84% said that they were complimented by the supervisor when they did a good job. Thus this information clearly reveals the existence of harmonious relationship between the worker and his supervisor. A large percentage of workers (71.22%) said that they would like their children to get employed in the Shipyard. They also said that their families have a good image of the Shipyard and thought it as a good place to work.

Discipline is a fundamental requirement for people working in any organisation. However, indiscipline among the workers is one of the most important problems faced by Indian industries. But in the Shipyard the rate of indiscipline declined from 9.42 to 2.64 during the period 1957 to 1971. The improvement in discipline was mostly due to the firmness with which the disciplinary programme was implemented by the

management. Punishments varied from oral warning to dismissals, after due enquiry in respect of the charge against the worker. The management also informs the union before any severe punishment is imposed on any worker. Thus the union leaders are also taken into confidence, and their co-operation is sought while implementing its disciplinary programme. Departmentwise study of indiscipline has not shown any consistency during the period. Categorywise study of indiscipline showed the rate was low among skilled workers than it was in the case of semiskilled and unskilled workers.

A study of the nature of indiscipline is also important as some indiscipline may be of serious nature requiring an immediate attention of the management. It is found that unauthorised absence formed the chief feature of indiscipline throughout the period of study. Its percentage varied between 16.90 in 1957 and 81.41 in 1962. Management did take action to reduce the incidence of unauthorised absence through written warnings, suspensions and dismissals, and this had its favourable effect in the last three years. Cases of late coming, sleeping on duty, attending duty in drunken state were completely absent in 1971; but thefts were showing an upward trend in many of the years. Some were given written warnings and others were suspended and dismissed depending upon the nature and magnitude of the thefts.

Most of the cases of indiscipline were found to be met with written warnings and their percentage varied from 30.82 to 76.70 during the period under study. But the percentage of dismissals had declined from 12.68 to 6.80 during the period. This shows the proportion of indiscipline which warranted severe punishment has come down in recent years.

Majority (51.71%) of workers also felt that the disciplinary programme of the management is justifiable, and it is also found that there were no cases in which the workers had gone to court of law against the disciplinary action taken by the management. Officers also felt that the standard of discipline was on the improvement particularly during the last two years.

Upto 1971 there was no written grievance procedure to dispose off complaints and grievances made by the workers. This led to a considerable waste of time giving rise to dis-

contentment among the workers. With the introduction of the written procedure in 1972, the workers, officers and union leaders have had a clear cut idea as to the grievance procedure.

An enquiry about the working conditions, temperature, air, illumination, noise, and other factors of environment which will have a major influence on health and efficiency of workers, revealed that a majority of workers, were satisfied with the general working environment with the exception of noise and heat. However, the nature of the work in the Shipyard is such that very little improvement could be made in this regard.

Absenteeism

A high rate of absenteeism results in loss of production, increase of labour costs and in lowering the operational efficiency. In the Shipyard, absenteeism was around 13% whereas the average rate of absenteeism for all industries in India works out to 14.60%. Further it was found that although the overall rate of absenteeism had increased from 10.51 in 1957 to 14.47 in 1965 subsequently it had declined to 13.19 during 1970-71. Absenteeism due to accident rest had declined from 2.05 in 1957 to 0.64 in 1971—probably due to the measures taken by management like improved medical facilities both within and outside the yard. Authorised leave had also declined from 9 to 3.12 and it is only leave with pay which had shown rising trend during the period under study. Factors like continued interest in their native places, sickness, observation of social customs regarding festivals, marriages, and funerals were found to be largely responsible for absenteeism—especially after the pay day in the Shipyard.

Accidents

Accidents constitute an important index of the health of any organisation which influences the efficiency, for accidents mean death or permanent or temporary disablement. Industrial accidents and the resulting injuries have become a regular feature of mechanisation of industry, but in the Shipyard the frequency rate of accidents was generally on the decline. While the number of injuries (caused to workers) has reduced from 172 in 1962 to 54 in 1970 the frequency rate has come down from

0.1632 to 0.0531 during the period. It is heartening to note that the Shipyard has won the national safety award during the years 1970 and 1971 for achieving the lowest frequency rate of accidents among the group comprising of rail road equipment, shipbuilding, ship repairing organisations. The shipyard also has been awarded the state safety award during 1970 and 1971 for achieving the maximum reduction in the frequency rate of accidents among the group of engineering industries. This recognition was the result of several steps taken by the management like, appointment of safety engineer, displaying of safety literature in various places, safety education, etc. However, the severity rate was fluctuating during the period with a maximum of 1.2739 in 1969 and minimum of 0.9195 in 1970.

Accidents do not just occur but they are caused hence causes responsible for these accidents in the Shipyard were also enquired into. Majority of accidents were found to be due to human failures particularly due to eye injuries due to dust particles or other objects and struck by an object due to fall or hit. This indicates that accidents could be further avoided by the workers through a little more safety mindedness. Categorywise study of involvements in accidents shows that the skilled workers, were mostly involved in the accidents.

Free medical treatment is provided to all injured employees along with the payment of compensation under the Workmen's Compensation Act. Further, persons sustaining permanent or partial disablement were taken back to duty after having been examined by a committee consisting of the medical officer, department head and the Managing Director with probable cut in emoluments provided that they were found fit for duty. Such workers were tested, every six months, and the cut in their emoluments restored as the case may be with the recommendation of the above committee. It may be noted here that this practice is followed by the management in pursuance of conciliation proceedings of 1954, even though it is not obligatory under the Act. Further even though as per the Workmen's Compensation Act, an employer is not liable to pay compensation for the waiting period, the management of the Shipyard was good enough to pay the compensation during that period also as an exgratia measure.

The management of the Shipyard recognising the concept that an intelligent worker who does the same job, in course of time may entertain ideas to improve efficiency through better production with less human effort, introduced a suggestion scheme with the aim of rewarding worthwhile suggestions. This system, certainly encourages continuous thinking and thereby promotes efficiency on the part of employees. A review of the working of this scheme showed that many workers have come forward in making suggestions thus showing the response, the scheme had evoked.

Productivity Efficiency

Future progress of any organisation and its employees depends to a large extent on the rate of productive efficiency-indicating thereby the utilisation of its resources in terms of manpower, materials and machinery. Systematic studies, for the measurement of productivity in Indian industries face many limitations because of the absence of proper and adequate records of factorial cost-benefit analysis. This limitation equally applies to the Hindustan Shipyard. However, an attempt is made to study productivity in the Shipyard, in general terms, based on certain factors. While the capacity of the Shipyard is reckoned at three ships of 38,000 to 40,000 DWT per year, the average actual production has worked out at only 2.4 ships. It is found that there was no uniformity in the time taken for the construction of ships of the same size. Time taken from the date of keel laying to the date of launching varied from six months to 43 months, and the time taken from the date of launching to the date of delivery varied from three to 60 months. Further, not much of any relationship between tonnage and time taken for completion of different stages could be observed. However, the average time taken for completion of the construction of a ship has come down from 34.55 months during 1962-66 to 30.55 months during 1967-71.

The total DWT of ships built in each year during the period 1957 to 1971 was mostly fluctuating – the lowest tonnage 5,405 was in 1960 and the highest tonnage – 51,697 was in 1966. These fluctuations were also found in per worker DWT with 1.38 DWT and 12.39 DWT in 1960 and 1966 respectively.

The value of ship construction work was increasing consistently from Rs. 290.93 lakhs in 1956–57 to Rs. 818.50 lakhs in 1970–71 with the exception of 1958–59, 1961–62, 1963–64, 1964–65, 1966–67 and 1969–70, when strikes were mainly responsible for the decline. The other important reason however was unsatisfactory flow of materials. The per worker value of ship construction work has increased from Rs. 8,363 in 1956–57 to Rs. 21,144 in 1970–71. The aggregate value of total production (consisting of the values of ship construction ship repair and other items) has gone up from Rs. 298.04 lakhs in 1956–57 to Rs. 851.20 lakhs in 1970–71. This has led to an increase in per worker value of total production from Rs. 8,567 to Rs. 21,989 during the period 1956–57 to 1970–71. However, the increase in per worker value of total production cannot solely be attributed to the increase in the efficiency of the workers as the price of raw material like steel and other items have gone up abnormally especially during 1970–71. Also the wages have recorded an increase.

It is true the productivity of the Hindustan Shipyard is very low compared to that of the Japanese Shipyards. It was also observed by the Bureau of Public Enterprise that while the Shipyard requires 232 man-hours, per DWT to construct a ship of Mitibushi Type, a Japanese Shipyard requires only 17 man-hours per DWT. Even though it may not be fair to compare the standards of productivity of the Shipyard with that of the Japanese Shipyard, still the difference is so much that a comparison could help in initiating a suitable action to step up productivity. The causes for this low level of productivity are examined by many committees and is attributed to factors like unsound flow of materials—indigenous as well as imported—lack of adequate ancillary units supplying necessary components, existence of outdated working methods, lack of adequate coordination between planning and execution of production activities and the absence of technical audit. The importance of a system of performance measurement integrated with the production budgets, at this juncture when Shipyard is endeavouring to increase production to the maximum extent possible, needs no emphasis.

It has also been pointed out by some studies that the man-

power utilisation in the Shipyard was only of 38.60% and the average efficiency of labour was only 33%. What is required to step up productivity of labour is the introduction of a suitable group incentive schemes with clear job specifications, time and motion studies, simplification, standardisation and specialisation of work, etc. It is true that introduction of incentive system involves many limitations but efforts may be made to introduce a group incentive plan whereby the benefit of mandays saved in respect of each ship compared to mandays scheduled to work could be distributed in some agreed ratio between the employees and the enterprise. This would encourage group effort, strengthen comradeship and results in substantial savings in cost of production. It was also found that 86.34% of workers were of the opinion that they would work more efficiently if some of these factors were introduced. From this it is clear that there exists ample scope for improving the productivity of labour. In this context it is to be mentioned that it is not for the chief executive alone or the personnel manager, who have to take major responsibility but it is for all supervisors to delicately weave the total range of human resources available with them into a meaningful and purposeful pattern so as to enable them to contribute their best to the prosperity of the nation. It is heartening to note that steps have been taken continuously to reduce the number of 'nil allocated' workers. The number had come down from 271 in 1957 to 31 in 1971, thus saving the cost of unutilised labour as well as preventing the adverse effects of such labour on the morale of other workers. A better preplanning of the manpower utilisation, as suggested earlier, can go a long way in eliminating 'nil allocated' worker group altogether.

Monetary Emoluments:

As is generally true with the workers in the developing economies, monetary emoluments play a major part in stimulating the workforce in India also. In the Shipyard also majority (54.15%) of workers preferred higher wages, to other elements like security of job, better working conditions, recognition of job, etc.

Shipbuilding industry, being mainly an assembly industry,

is labour intensive and the cost of labour influences significantly the cost of construction of a ship. In fact in advanced shipbuilding countries like Japan, the cost of labour in shipbuilding has become a major component which made the management's search for sites in other countries for setting up new shipyards, where the cost of labour is relatively low. From this point of view the prospects of the Hindustan Shipyard are indeed quite bright and encouraging as it has a large source of cheap manpower both skilled and unskilled. It has been calculated that the labour cost in the Shipyard is just about half of the European labour cost.

In the Shipyard all workers are daily rated but are paid once a month on every 10th working day of the month. The Labour Union has been demanding to convert the daily rated system into monthly basis which they expect will strengthen security of service and consequently improve the moral and productivity. This issue is reported to have been under consideration of the management. The total amount of wages and allowances paid to workers has increased by nearly three times—from Rs. 49.80 lakhs in 1957-58 to Rs. 151.90 lakhs in 1970-71. The total amount of salary and allowances paid to staff and officers has increased by nearly four times—from Rs. 27.39 lakhs in 1957-58 to Rs. 103.17 lakhs in 1970-71. This was largely due to increase in the total number of employees periodic increase in the dearness allowance and the general revision of pay scales consequent upon the recommendations of the One-man Committee. Per worker wages and allowances had also increased by nearly three times from Rs. 1,258.65 in 1957-58 to Rs. 3,905.47 in 1970-71. Per employee salary and allowances had more than doubled during the above period (from Rs. 3,168.01 to Rs. 7,156.82). But the workers welfare depends not on how much money income he receives, but on the purchasing power of his income—the amount of goods and services which he can buy with it, i.e., the real wage. Hence, the indices of average monthly real wages were calculated with reference to 1956 as the base year and they are compared with the real earning of factory workers in general. In the skilled category the index of money wage had gone up from 107.48 in 1957 to 176.48 in 1969. But the

real wage has declined from 97.50 to 90.43 during the same period. This was due to the increase in the cost of living. In respect of semiskilled workers, while the index of money wage has gone upto 199.64, the index of real wage stood at 102.30 by 1969. As regards unskilled category the money wage has increased from 104.77 in 1957 to 192.87 in 1969. The index of real wage stood at 98.83 thus showing a slight increase compared to 1957.

The increase in the index of money and real earnings of workers in the Shipyard has also been compared with the earnings of all India factory workers. While the money earnings of workers in the Shipyard have gone up to 195.29 in 1971 (with 1961 as the base year), the real earnings stood at 108.99. The index of money earnings of factory workers increased to 181 in 1971 and their real earnings declined to 99 during the same period. Thus it is observed that the real earnings of the Shipyard workforce has increased relative to that of the all-India factory workers.

Money wages lagging behind the cost of living on the one hand, and the prevailing wages in the nearby industrial undertakings and similar shipbuilding concerns like Mazagon Dock Ltd. made the workers to go on strike frequently demanding revision of pay scales. Finally it was in 1970 the employees succeeded in getting their pay scale revised with effect from September 1969.

It may be noted here that there was no general revision of basic wages, since 1948. There were only minor alterations through ad hoc increases in dearness allowance, but this gave only partial relief against soaring prices. In 1964 a Central Wage Board for engineering Industry (which includes the Hindustan Shipyard) was constituted by the Government of India for revision of pay scales and to consider other ancillary matters, but as there was no unanimity in the recommendations of the wage board, a One-man Committee was appointed by the Shipyard to go into the question of revision of pay scales. Implementation of these recommendations resulted in substantial increase in the basic wage as well as other allowances for all categories of employees. In the case of skilled workers the minimum basic wage was increased from Rs. 1.75/2.00 to

Rs. 6.33/8.46; semiskilled from Rs. 1.19/1.37 to Rs. 6.29 and unskilled from Rs. 1.12/1.19 to Rs. 6.29. Thus it is seen as per the new pay scales no worker would get less than Rs. 6.29 per day and no staff member would draw less than Rs. 164 per month. The dearness allowance, yard allowance, and outdoor allowance have not only been liberalised but also increased. Consequently, the average annual money earnings of workers have gone up from Rs. 1,258.65 in 1957-58 to Rs. 3,905.47 in 1970-71, an increase of 210.29% over the period of 14 years. During the same period, the average annual money earnings of officers and staff have increased from Rs. 3,168.01 to Rs. 7,156.82, an increase of 125.91%. Although the Hindustan Shipyard was exempted from the purview of the bonus act, the management has started paying ex-gratia bonus with effect from 1965-66 at the minimum rate of 4% (or Rs. 40 whichever is higher) of the total emoluments with effect from 1971-72 the minimum rate of bonus has been increased from 4% to 8.33% (or Rs. 80 whichever is higher) subject to a maximum of Rs. 750. The share of employees in the value of total production rose from 23.87% in 1957-58 to 37.22% in 1970-71.

However, the total emoluments—the minimum and maximum amounts—of employees in the Shipyard do not compare favourably with those obtaining in other local units like Bharat Heavy Plate & Vessels Ltd., or sister concerns like Mazagon Dock Ltd., Cochin Shipyard, etc. This analysis shows the need for a fresh look into the pay structure, so as to eliminate particularly the unjustified discrepancies in the wage structure of similar shipbuilding units in the country. Further, internationally the wages of shipbuilding workers have been constantly on the increase and for instance between 1969 and 1972 the wages of Japanese shipbuilding workers have risen by 70%. All this indicates there exists a case for rationalising the wage structure of the Shipyard workers.

Welfare Programmes

The provision of fringe benefits beyond monetary emoluments has become a regular feature of industrial employment system since the Second World War. In many countries, the employers have instituted several schemes to provide employees

with decent housing, recreational and cultural amenities, paid holidays and vacations, social security benefits, etc. While the employees were benefited through direct increase in real income and thereby increased standard of living, the employer is benefited through reduced turnover, increased morale and productive efficiency of workers. This undoubtedly will have its favourable impact on the quality, quantity and cost of production. However, the proportion of fringe benefits either in the wages of employees or in the total cost of production has varied considerably from country to country; from industry to industry within the same country; and from unit to unit within the same industry. This was more influenced by historical and socio-economic circumstances, profitability, governmental laws prevailing in each country, industry and individual concerns. The existence of enlightened management and active and powerful trade union would certainly step up the proportion of the fringe benefits.

In the Hindustan Shipyard many schemes of fringe benefits—education, housing, recreation, gratuity and provident fund, pension, canteen, co-operative credit society and medical aid—have been introduced in conformity with the trend of the movement of fringe benefits. The total amount spent by the management on these welfare activities has increased from Rs. 4.74 lakhs in 1957–58 to Rs. 61.79 lakhs in 1970–71. Per employee welfare expenditure has gone up from Rs. 100.53 to Rs. 1,163.14 during the same period. Payment of house rent allowance and enhancement of retirement benefits were found to be mainly responsible for the increase in per employee welfare expenditure.

The Hindustan Shipyard maintains a good housing colony—accommodating 1,731 families—which is very near to the plant site. All modern amenities such as black top roads, Parks, marketing centres, water taps and drainage have been provided. There is every need to build many more houses particularly after the commissioning of the dry dock. It is seen that only 30.24% of workers and 46.03% of staff have been provided with quarters. However, the management has taken up the problem of providing accommodation for more and has been pursuing to implement a scheme for the construction of 800 additional quarters with the financial help of the State Government and the

Life Insurance Corporation of India. To enable the employees coming from distant areas the management granted loans to buy cycles for their use.

The canteen facility is provided by the management right from the beginning, and steps have been taken from time to time to improve its service. The food items were supplied to employees at subsidised rates and it is also found that the canteen is fully patronised by the employees. A dining hall with adequate furniture, water tap, fans has also been provided for workers and staff. Adequate facilities are also provided by way of wash basins with taps and soaps. Annual per capita expenditure on canteen service has gone up from Rs. 7.67 in 1957-58 to Rs. 67.53 in 1970-71.

The Shipyard has three modern (one in the yard and two in the colony) well equipped dispensaries with qualified medical officers and ambulance provided with all necessary equipment. Free medical aid is given to employees and their families. One Family Welfare Adviser and one Social Worker are also attached to the colony dispensaries. Annual per capita expenditure on medical aid has increased from Rs. 3.45 in 1957-58 to Rs. 25.49 in 1970-71. In spite of this, only 13% of the selected group of workers and 2% of staff were satisfied with the quantity and quality of medical aid. The need for opening of more dispensaries with adequate facilities was stressed by workers and staff.

The Management of the Hindustan Shipyard has provided recreation facilities for its employees by organising a recreation club in 1954. This club is equipped with necessary facilities for indoor and outdoor games and for organising periodical entertainments. The membership fee of this club is very low with less than rupee one per month for the employees. However, as it is true with other Indian workers, very few workers of the Shipyard participate in these recreational activities. Most of them spend their leisure time with their families or in social visits or in shopping. Thus they found practically no time for making use of the facilities available in the recreation club provided by the management. A ladies' club comprising of the wives of the employees has also been organised, with the objective of providing recreational, social and cultural activities to

the families in the colony.

Hindustan Shipyard Employees' Welfare Committee headed by the wife of the Chairman & Managing Director has been set up to initiate and undertake all social and economic measures so as to improve the conditions of the family members of employees by providing necessary amenities and by affording relief to the extent possible in times of distress. Annual per capita expenditure on recreational activities has increased from Rs. 0.36 in 1957-58 to Rs. 5.44 in 1970-71.

A welfare centre is also opened in the colony by the State Government, providing for regular training in tailoring, indoor and outdoor games. A library is also attached to the centre.

In the course of interviews it was found that majority of the workers (90.24%) were indebted and their take-home-pay was very low. The average amount of indebtedness has been worked out at Rs. 2,470-72. With a view to provide debt relief to the workers and staff two co-operative credit Societies – one for the workmen and the other for staff have been started to provide credit at low rate of interest, to be repaid in easy instalments by way of recovery from their monthly emoluments. The number of members of the Hindustan Shipyard Labourers' Co-operative Thrift and Credit Society Limited, has increased from 1,129 in 1956-57 to 2,110 in 1970-71. The amount of loans disbursed to members, has phenomenally increased from Rs. 2.03 lakhs to Rs. 11.35 lakhs during the same period. The number of members of the Hindustan Shipyard Staff Co-operative Society Limited has increased from 568 in 1957-58 to 1,034 in 1970-71. The loans disbursed to members by the society has gone up by nearly seven times starting from Rs. 3.06 lakhs in 1957-58 to Rs. 31.19 lakhs in 1970-71. Among the selected groups, 46.83% of workers and 69.84% of staff were members of these societies. The general opinion of workers and staff regarding the functioning of these credit societies, was favourable as could be observed from the interviews. A large percentage of workers and staff who were members of the societies could get loans at the right time.

The Hindustan Shipyard is imparting education to its workers, under the Workers' Education Scheme sponsored by the Government of Andhra Pradesh. About 1,896 workers have

been trained at the unit level classes by the scheme at the end of 1971-72. In addition, the management is also taking keen interest in educating the children of the employees. The management has set up a society called The Gandhigram Educational Society, which looks after the educational matters. Annual per capita expenditure on education has increased from Rs. 1.36 in 1957-58 to Rs. 8.32 in 1970-71. The workers in general had a favourable opinion towards the educational facilities provided to their children by the management; but however suggested in favour of increasing the number of seats in each class so that more children could avail the facility. Further they wanted the management to take interest in higher education also, for their children.

The management of the Shipyard is providing retirement benefits, viz., provident fund, family pension and gratuity or their employees for efficient and faithful service. Annual per capita expenditure on retirement benefits has gone up from Rs. 72.59 in 1957-58 to Rs. 766.15 in 1970-71. 29.76% of the workers and 49.21% of staff were satisfied with the retirement benefits provided by the Shipyard, but it was suggested that the employees should be entitled for gratuity after successful completion of 15 to 20 years instead of 30 years.

Conflict and Co-operation

With the growth of mass scale production, massive and integrated technology, stronger trade unions and employers' resistance, strike activity has been intensified and has almost become a natural phenomenon. This speaks of the need particularly in developing economies like India, to make earnest efforts on a continuous basis to locate the discontentment and investigate the causes therefor and try to resolve the conflict on a priority basis, so as to create and preserve smooth working relationship between the management and workers. The objective of setting up of socialistic pattern of society can be realised only when these two partners develop an acceptable mechanism of compromise, accommodation and a spirit of give and take with a broader understanding of their responsibility towards the nation as a whole. The Government of India is also very much alive to the problem and is taking many steps like introduction

of three-tier machinery of adjudication, emphasising on the prevention mechanisms like adhering to the 'code of discipline,' and 'code of conduct,' grievance procedure, and the new experiment of workers' participation in management. The Shipyard is no doubt by and large is following the procedure laid down in the Industrial Disputes Act of 1947 with regard to settlement of disputes. Many demands had been disposed off in the course of collective bargaining. But there were also cases when some of the unresolved disputes were settled at the stage of the conciliation and some at the stage of adjudication.

The demands put forward by the Union/Association from time to time represent the desires/dissatisfactions of workers and their disposal indicates the attitude and promptness of the management in fostering cordial relations. Hence an analysis of demands placed by the Hindustan Shipyard Labour Union has been made in the course of this study. This analysis showed that the demands under the group of 'wages and allowances' constituted 20.80% of the total demands, which was followed by welfare measures accounting for 17.49%. Next follows recruitment, promotion, gradations and transfers which accounted for 14.52. This conforms with the general trend of the labour demands in Indian industries. Many of the demands (34.65%) have been rejected by the management. Only 26.41% of the total demands have been accepted with another 9.24% partially accepted. Roughly 18% of the total demands relating to wages and allowances have been accepted by the management and this percentage was slightly higher with regard to all other groups of demands. It is also heartening to note that a large proportion of union issues were acceded by the management. It is also observed that the Union had placed the largest number of demands (95) during 1968; but out of these nearly 75% has been either rejected or not settled immediately in favour of workers. This situation has been further intensified with the new demands raised in the first four months of 1969 and ultimately resulted in a major strike lasting for 27 days in that year. This underlines the need for prompt disposal of demands by the management as a prerequisite for fostering cordial relations.

Some of the long standing demands, when all other avenues

have failed, are likely to result in strikes. An analysis of strike activity in any organisation helps us in exploring the causes for and the consequences of and in examining the possible methods of avoidance of strikes. The era of strikes in the Shipyard began from the 4th July 1944 when 136 workers went on strike for one day demanding the grading of carpenters. During the entire period of 30 years (1942 to 1971) there were 48 strikes—32 yardwide and 16 departmental—and the strike activity has been spread out unevenly during this period. Upto 1969 there were strikes continuously except during the years 1949, 1955, 1959, 1962 and 1964. While the number of mandays lost (2,31,290) was maximum in 1947, the amount of wages lost (Rs. 8,55,378) was maximum in 1969. 66.67% of the total number of strikes were conducted for a duration of a day or even less. These work stoppages were mostly concerned with the union issues like the workers demanding permission to attend union meetings during working hours—the rejection of which resulted in walkouts by the workers. A little realisation of their responsibility on the part of workers and their leaders could have easily averted all these strikes. The second major cause which resulted in strike for a day or less was disputes over work assignments and work-loads. A clear programme of job analysis would have eliminated these strikes.

There were seven major strikes—yard-wide—conducted for four days and above which account for nearly 92% of the total number of mandays lost in the Shipyard during the entire period of 30 years. Out of these, four strikes were conducted on account of disputes over wages and allowances, two strikes on account of retrenchment of fellow workers and one on account of widespread state level agitation for locating the steel plant in Visakhapatnam. The analysis of these major strikes, showed that if only both the management and unions exercised some restraint, understanding and adjustability in their dealings, most of these strikes could have been avoided. It is also unfortunate to note, of course, as it is true in other industrial undertakings in India, it is only after the strike had started that the things move on speedily and the management, government and union are forced to come to a settlement. This tendency needs to be checked before we expect any decline in

the incidence of the strike activity in any industrial concern including the Hindustan Shipyard.

An attempt has been made to measure the incidence of strike activity in the Shipyard through nine indices on the basis of number of workers involved and the number of mandays lost. The percentage of workers participated in all the strikes was above 60 and in the seven major strikes it was above 70. The number of workers involved in each strike was more than the union membership in most of the years—thus indicating participation by the non-union members. The average number of mandays lost per participant has been worked out at less than 10 during the period 1957 to 1971 with the exception of 1969. The average number of mandays lost per union member fluctuated from strike to strike. The average number of mandays lost per worker was less than five throughout the period with the exception of 1961 and 1969. The number of mandays lost per 100 mandays available (mandays scheduled to work minus mandays lost due to accidents and absenteeism) and the number of mandays lost per 100 mandays scheduled to work were less than one with the exception of 1961, 1966 and 1969. The industrial relations index was either unity or approaching unity with the exception of 1961 and 1969. It may be noted here the lower the index approaching unity, the less the number of mandays lost due to strikes and better the state of industrial relations. This index stood at 1.0756 and 1.0878 in 1961 and 1969 respectively during which period major strikes have been organised.

The number of mandays lost per worker in the Shipyard was also compared with the public and private sectors. With the exception of 1966 and 1969 the state of industrial relations in the Shipyard as measured by the above index was quite favourable, compared to that of public and private sectors. Further it is heartening to note that during the last two years 1970 and 1971 not even a single manday was lost due to strikes in the Shipyard. This speaks of the constant alertness and realisation of responsibility on the part of management and labour. If the spirit of conciliation, adjustability, mutual understanding and confidence prevails and if the method of collective bargaining is vigorously pursued in resolving all the differences the Shipyard

can hopefully expect to become a model public sector undertaking in the entire country. It may be noted here, nearly 45% of the workers were in favour of banning strikes, as they were not satisfied with their outcome. The management should take advantage of this feeling and initiate steps to strengthen relations on healthy lines. The analysis of staff strikes, more or less, revealed the same results and some of them in fact were organised jointly with labour.

It is also observed that there is no reason why the management as well as the union should not take necessary steps to start and develop the scheme of workers' participation in management in the Hindustan Shipyard, one of the big public enterprises in the country. This scheme may be started with the formation of departmental committees, supported by yard-wide joint committee and further extended so as to cover participation of labour representatives in the Board of Directors.

Role of Employee Organisations

A trade union can help bring about harmonious relationship between the employer and employees by instilling a sense of responsibility in the minds of its members. This paves the way for increased industrial productivity which contributes to the prosperity of the employer, employees and the nation at large. However, trade union movement in India has not developed on such sound lines and is today beset with many obstacles like multiplicity of unions with divergent political ideologies, unsound finances, outside leadership, irregular working, etc. Most of the union leaders combine political interest with union work and thus make them appendages of political parties. Independent trade union and independent trade union leadership are in a microscopic minority. Against this background, if we examine the trade union movement in the Shipyard, many favourable points can be mentioned. Right from the beginning the Shipyard Labour Union (started on the 12th November 1943) has been working as an independent union without having any relationship with either any of the central trade unions or any of the political parties (the only exception was the period 1948 to 1951

during which it was affiliated to Indian National Trade Union Congress). The rank and file workers in the course of interviews preferred an independent trade union which can apply itself exclusively as the bargaining agent for the workers. According to them the objective of changing the economic and political system of the country is not a sound aim of a trade union and consequently was listed last in the order of preferences. The succession list of the trade union leaders shows that during the entire period of 30 years, it was only during 11 years, the presidentship was held by an outsider. Probably in the initial stages reliance on an outside political leader, was felt to be inescapable for an effective rapport with the management and the government. Now the rank and file workers have come to the stage of expressing preference for internal leadership. The union was found to be taking keen interest in protecting the interests of workers and it had organised a number of strikes in this direction. In all the 32 yard-wide strikes-conducted by the union, it had by and large inspired its members as well as nonmembers and developed implicit faith in the leadership. The seven major strikes conducted in 1945, 1946, 1947, 1953, 1961, 1966 and 1969 for 6, 15, 105, 21, 25, 4 and 27 days respectively speak emphatically of the organisational ability of the union and the genuineness of the cause for which it went on strike. The latest strike in 1969 led to the appointment of One-man committee, which resulted in wholesale revision of pay scales and enhancement of allowances. Most of the workers in the Shipyard in the course of interviews expressed the opinion, that their leaders were helpful to them and they (96.59%) also strongly believed that there should be only one union in an undertaking to avoid union rivalries and consequently weak bargaining power of labour. Although efforts have been made to start a rival union, the response from workers was very poor and consequently within one year it had to be wound up. This situation of having only one union is really a welcome feature which deserves to be emulated by the workers in other places. In respect of staff also only one association – The Hindustan Shipyard Staff Association is functioning and is equally alive to the problems of its members. So far it had organised

eleven strikes – all of them plantwide and in which on an average more than 70% of the total staff had participated. It is also found that Labour Union and the Staff Association were collaborating with each other either in conducting negotiations with the management or in organising strikes. This unity among the working class is rarely found in other industrial establishments.

The membership of the Labour Union was fluctuating and in those years in which they had organised a strike it suddenly went up and in other years there was a slump. However, from 1962–63 onwards there was a continuous increase in the number of members and it had reached to 3,250 accounting for 83.16% of the total number of workers in the year 1970–71.

However, the level of members' involvement in the union activity was observed to be rather low. Less than 50% of members attended meetings during strike period. An analysis of incomes and expenditures of the Labour Union for the period 1957–58 to 1970–71 shows that a very small surplus is available to organise any new activity so as to promote cultural, social and economic interests of its members. This suggests that the union should strive to improve its finances preferably by raising the membership fee.

Thus most of the indicators point out the gradual development of cordial relations between management and personnel and between management and the unions in the Shipyard over the period 1957 to 1971 and they are found to have passed the period of conflict and reached the stage of working relationship and understanding particularly during the last two years – 1970 and 1971. While these relations could be further improved and strengthened by implementing some of the suggestions made in this study, the causes for under utilisation of capacity, delayed deliveries of ships and high cost of construction may have to be looked elsewhere rather than pointing solely at the state of industrial relations.